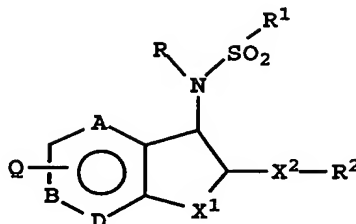


What is claimed is:

1. A compound having the structure



- 5 including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof, wherein

A, B and D are independently selected from CH or N;

- 10 X^1 is $\begin{array}{c} R^3 \\ | \\ (C)_n \\ | \\ R^4 \end{array}$ (where n is 1, 2 or 3),

O, NR^5 , S, SO, SO_2 , $-O-\begin{array}{c} R^3 \\ | \\ C \\ | \\ R^4 \end{array}$, $-\begin{array}{c} R^3 \\ | \\ N-C \\ | \quad | \\ R^5 \quad R^4 \end{array}$, $-\begin{array}{c} R^3 \\ | \\ S-C \\ | \\ R^4 \end{array}$,

$-\begin{array}{c} O \\ || \\ S-C \\ | \quad | \\ R^4 \quad R^3 \end{array}$ or $-\begin{array}{c} O \\ || \\ S-C \\ || \quad | \\ O \quad R^4 \end{array}$, wherein the heteroatom in each of the

above groups is linked to the aromatic ring;

- 15 (where R^3 and R^4 are independently H, alkyl, arylalkyl or cycloalkyl, or R^3 and R^4 can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R^5 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

- 20 R is H, alkyl, alkenyl, aryl, arylalkyl, heterocycloalkyl, cycloalkyl, or cycloalkylalkyl;

R^1 is alkyl, arylalkyl, aryl, alkenyl,

heterocyclo, heterocycloalkyl, $-\begin{array}{c} \text{heterocycle} \\ | \\ R^{5a} \end{array}$ (where R^{5a} can

be any of the R^5 groups), cycloalkyl, cycloalkylalkyl or

- 25 $-\begin{array}{c} R^6 \\ | \\ N-R^7 \end{array}$ (where R^6 and R^7 are independently selected from H, aryl, alkyl, arylalkyl or cycloalkyl, or R^6 and R^7 can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R^1 can

be taken together with the -N-S- atoms to form a 5- to 8-membered ring;

X^2 is a single bond, $\text{—}\underset{\text{R}^8}{\text{N}}\text{—}$ or —O— (where R^8 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R^2 is H, alkyl, arylalkyl, $\text{—}\overset{\text{O}}{\parallel}\text{C—alkyl}$, $\text{—}\overset{\text{O}}{\parallel}\text{C—arylalkyl}$, $\text{—CH}_2\overset{\text{O}}{\parallel}\text{C—O—R}^{10}$ or $\text{—CH}_2\overset{\text{O}}{\parallel}\text{C—}\underset{\text{R}^{11}}{\text{N—R}^{10}}$ (where

R^{10} and R^{11} are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R^{10} and R^{11} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring); and

Q is $\text{R}^{12}\text{—}\underset{\text{NC—N}}{\overset{\text{H}}{\text{C}}}\text{—}$, $\text{R}^{12}\text{—}\overset{\text{O}}{\parallel}\text{C—}$, $\text{R}^{13}\text{—}\overset{\text{O}}{\parallel}\text{S—}$ or $\text{R}^{12}\text{—heterocycle}$ (where R^{12} is alkyl, arylalkyl, aryl, $\text{—}\underset{\text{R}^{16}}{\text{N—R}^{15}}$, heterocycle, heterocycloalkyl, $\text{—}\underset{\text{R}^{14}}{\text{N—heterocycle}}$, where R^{14} can be any of the R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where R^{15} and R^{16} are independently selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or R^{15} and R^{16} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring; and

R^{13} is $\text{—}\underset{\text{R}^{16}}{\text{N—R}^{15}}$ (wherein this moiety is as defined with respect to R^{12});

with the proviso that where X^1 is $\text{—O—}\overset{\text{R}^3}{\underset{\text{R}^4}{\text{C}}}\text{—}$ and A, B and C are all carbon, then

(1) at least one of R^{15} and R^{16} is aryl, arylalkyl, heterocyclo or heterocycloalkyl, or alkyl of 4 to 12 carbons; and/or

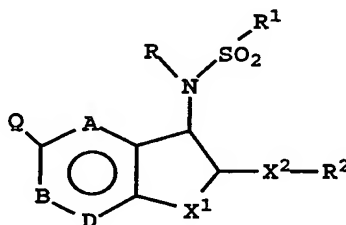
(2) Q is other than $\text{R}^{12}\text{—}\overset{\text{O}}{\parallel}\text{C—}$ (where R^{12} is methyl, ethyl, CF_3 or alkoxy); and/or

(3) where Q is $R^{12}-\overset{\overset{O}{\parallel}}{C}-$ and R^{12} is $\begin{array}{c} -N-heterocycle \\ | \\ R^{14} \end{array}$, then heterocycle is a monocyclic or bicyclic heterocycle ring containing from 5 to 10 ring members, containing one to five nitrogen atoms, and/or one or two oxygen atoms, and/or one sulfur atom; and/or

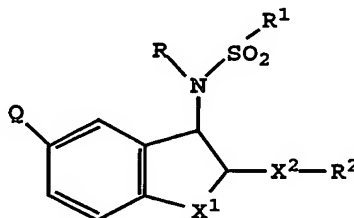
(4) where Q is $R^{12}-\overset{\overset{O}{\parallel}}{C}-$ and R^{12} is $\begin{array}{c} -N-R^{15} \\ | \\ R^{16} \end{array}$, then at least one of R^{15} and R^{16} contains an additional amino group or R^{15} and R^{16} taken together with the nitrogen atom to which they are attached form a ring which contains an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring; and/or

(5) where Q is $R^{13}-\overset{\overset{O}{\parallel}}{S}-$, and R^{13} is $\begin{array}{c} -N-R^{15} \\ | \\ R^{16} \end{array}$, then at least one of R^{15} and R^{16} contains an additional amino group or R^{15} and R^{16} taken together with the nitrogen atom to which they are attached form a ring which contains an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring.

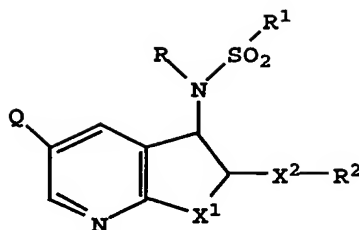
2. The compound as defined in Claim 1 having the structure



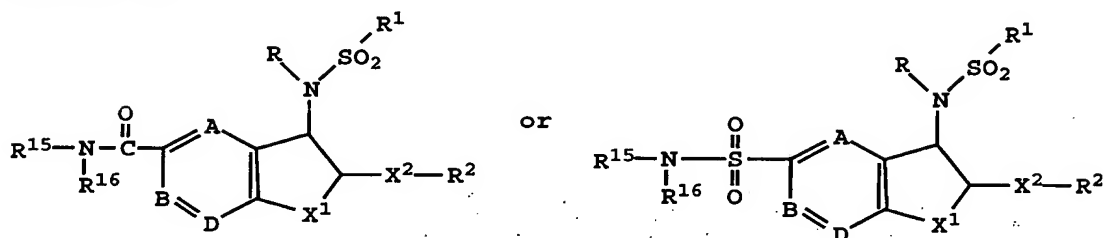
3. The compound as defined in Claim 1 having the structure



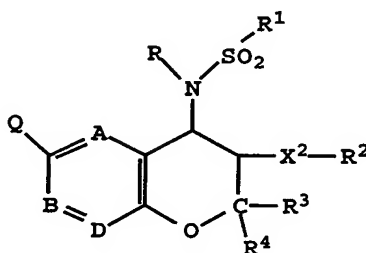
4. The compound as defined in Claim 3 having the structure



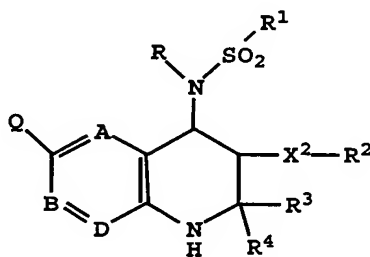
5. The compound as defined in Claim 1 having the structure



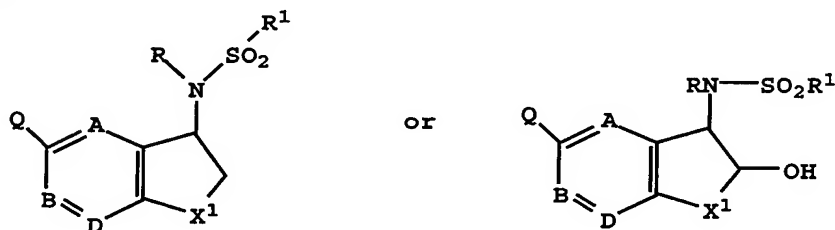
6. The compound as defined in Claim 1 having the structure



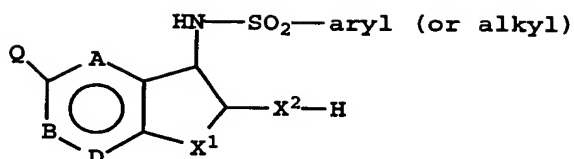
7. The compound as defined in Claim 1 having the formula



8. The compound as defined in Claim 1 having the structure



9. The compound as defined in Claim 1 having the structure



10. The compound as defined in Claim 1 wherein

R is H;

R¹ is aryl or alkyl;

5 X² is O or a single bond;

R² is H;

Q is $\text{—}\overset{\text{O}}{\underset{\text{R}^{16}}{\text{C}}}\text{—}\text{N—R}^{15}$ or $\text{—SO}_2\text{—N—R}^{15}$

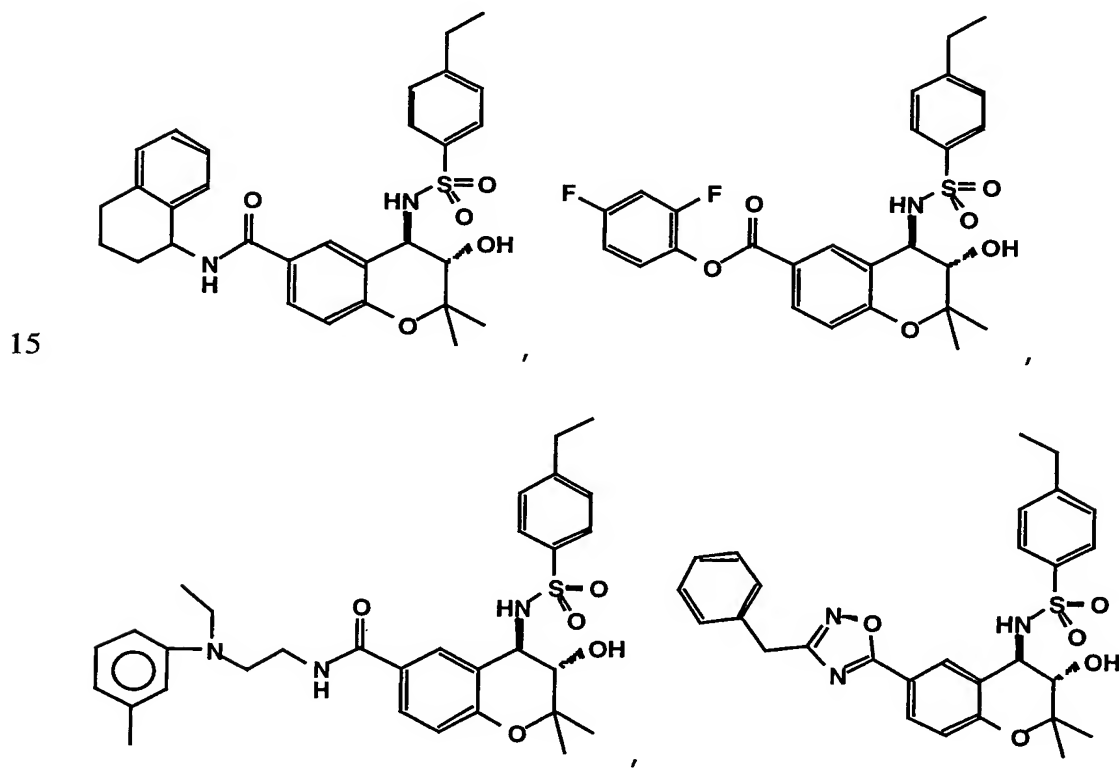
where R¹⁵ and R¹⁶ are independently H, aryl, aralkyl or aminoalkyl;

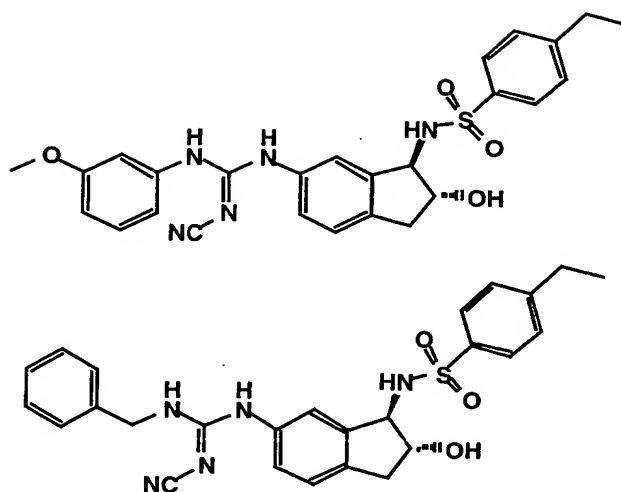
10 X¹ is $\text{—O—}\overset{\text{R}^3}{\underset{\text{R}^4}{\text{C}}}\text{—}$, $\text{—}\overset{\text{R}^3}{\underset{\text{H}}{\text{N}}}\text{—}\overset{\text{R}^3}{\underset{\text{R}^4}{\text{C}}}\text{—}$ or $\text{—}\overset{\text{R}^3}{\underset{\text{R}^4}{\text{C}}}\text{—}$;

A and B are each CH, and

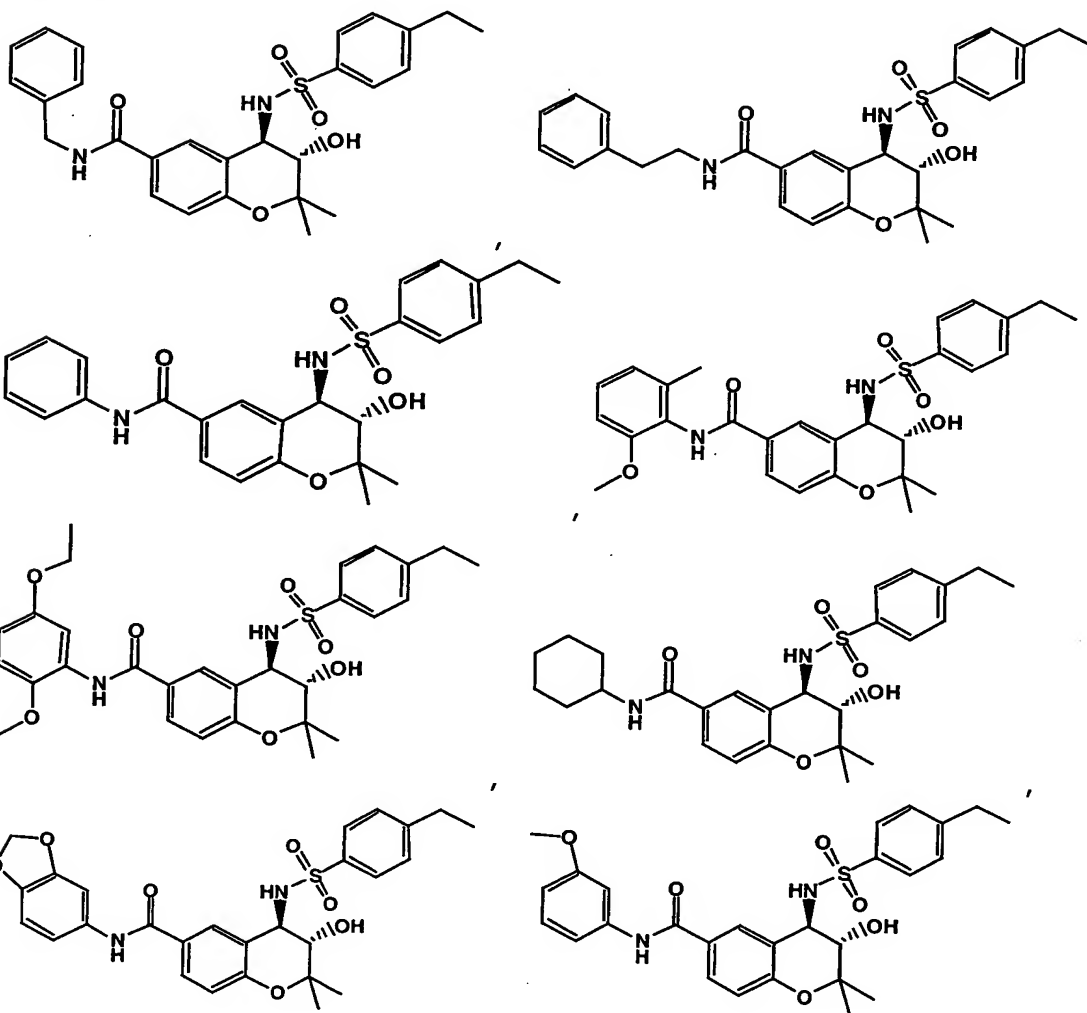
D is N or CH.

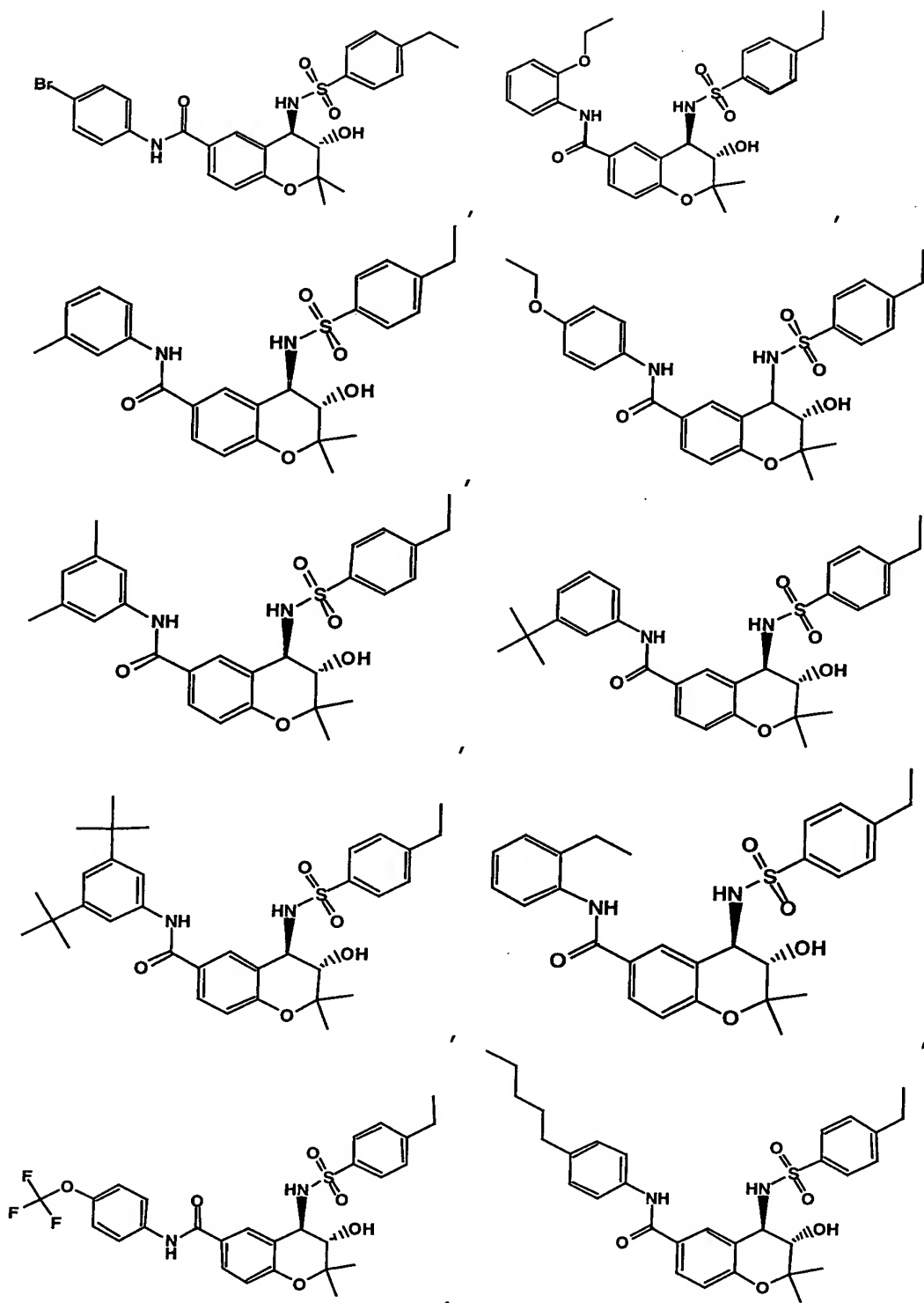
11. The compound as defined in Claim 1 having the structure

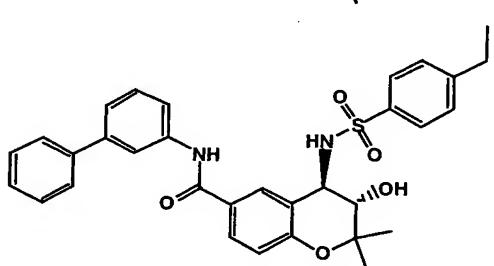
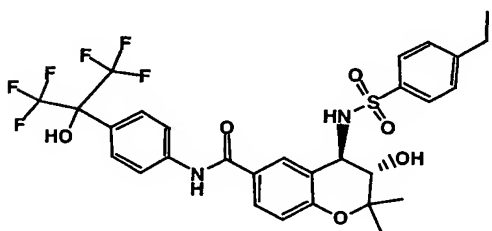
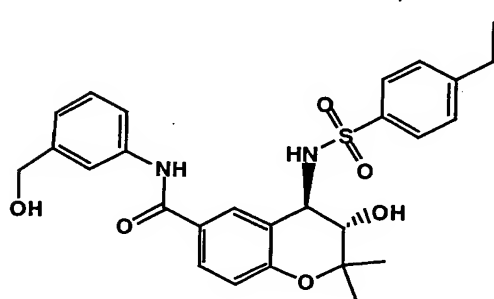
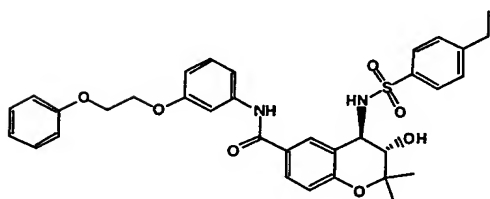
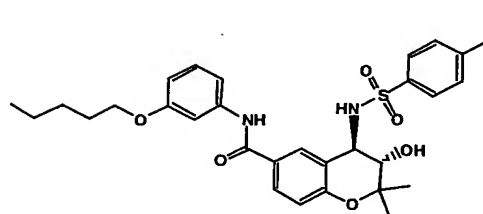
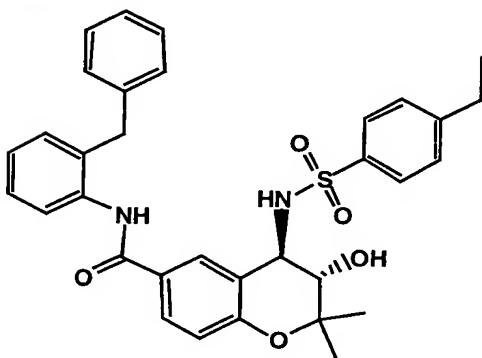
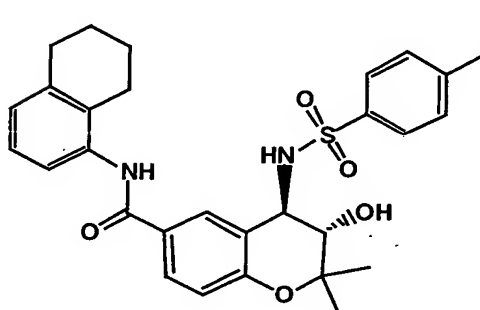
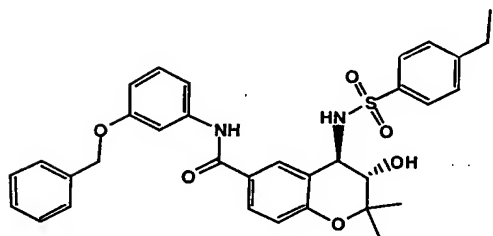
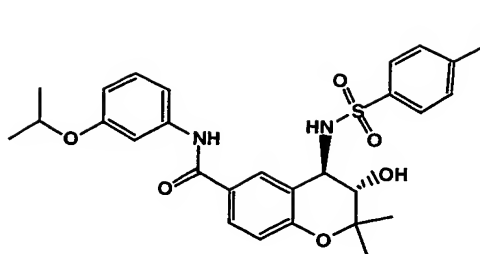
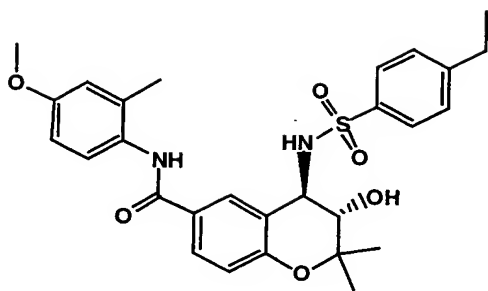


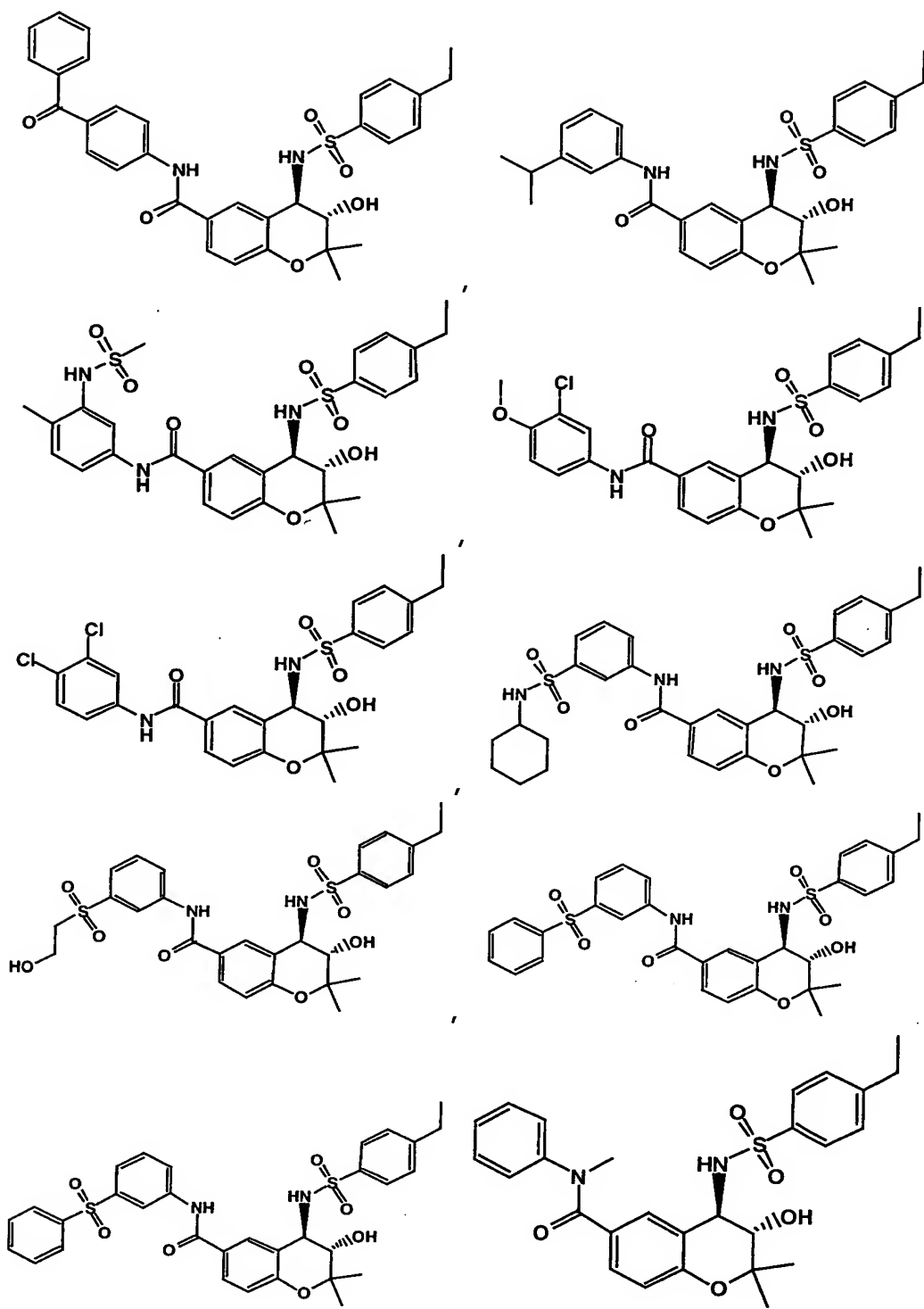


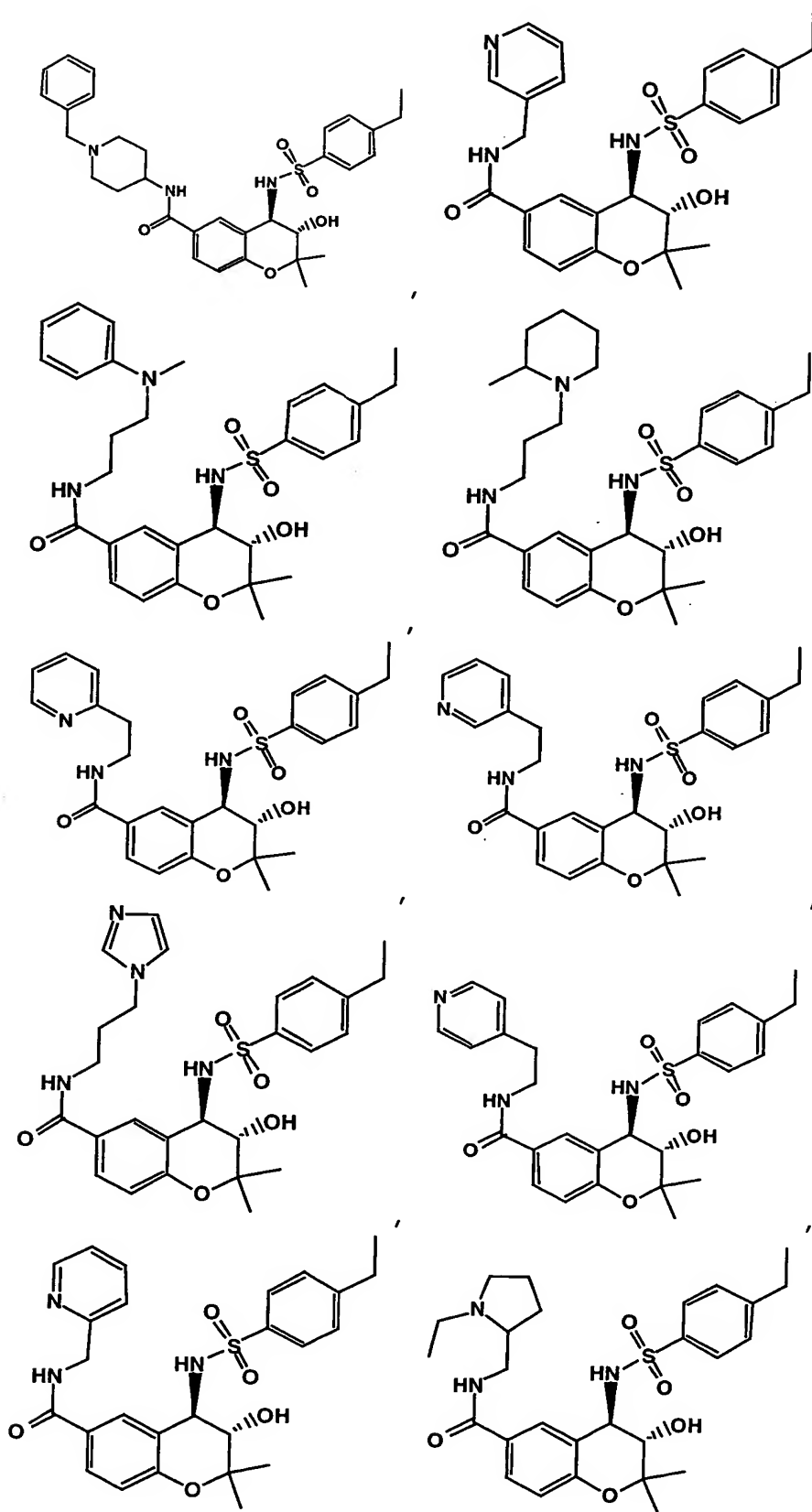
12. The compound as defined in Claim 1 having the structure

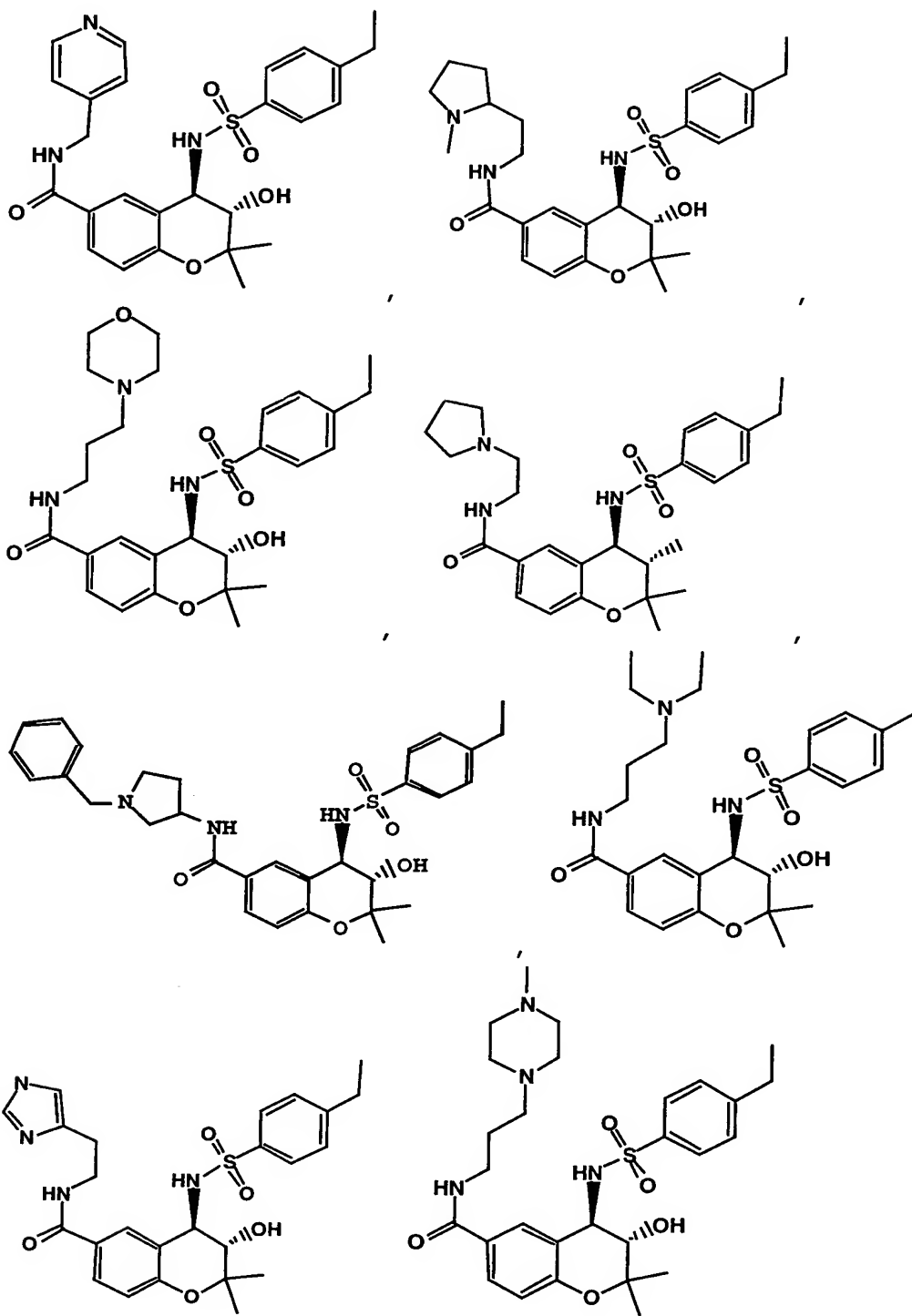


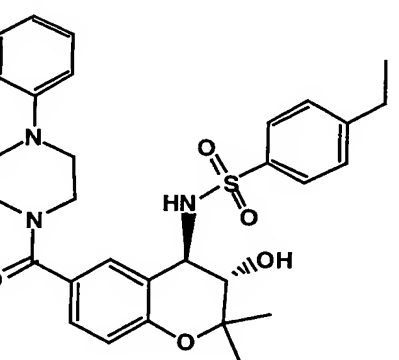
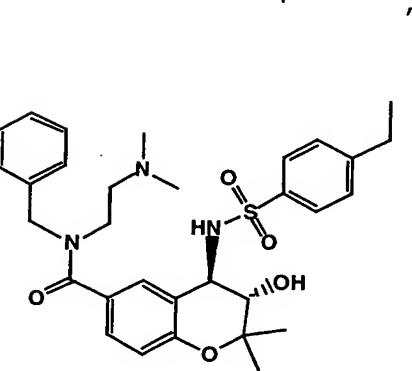
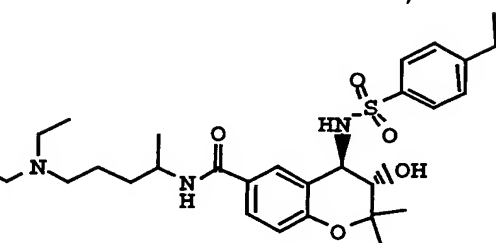
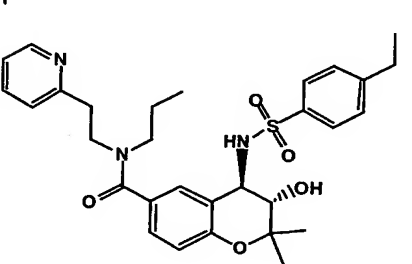
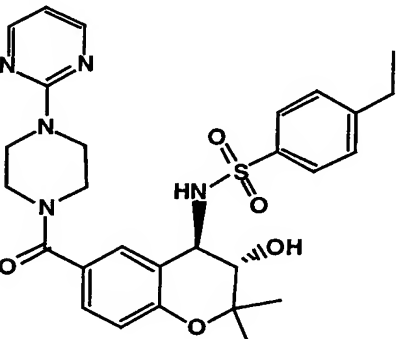
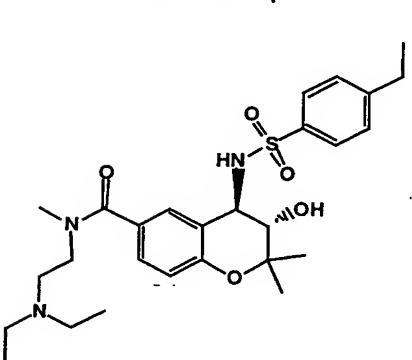
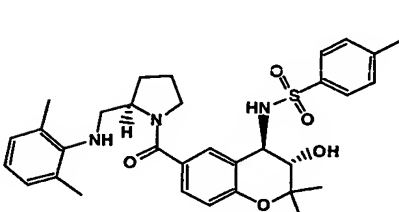
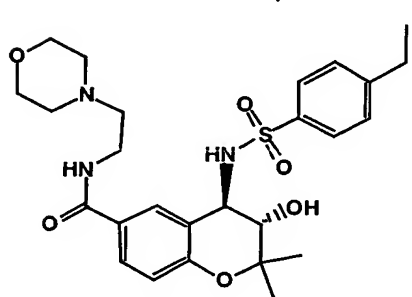
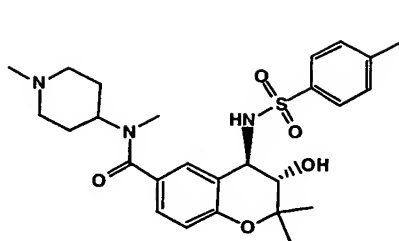
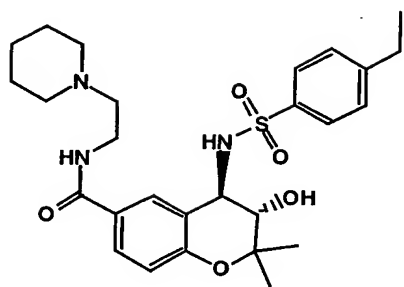


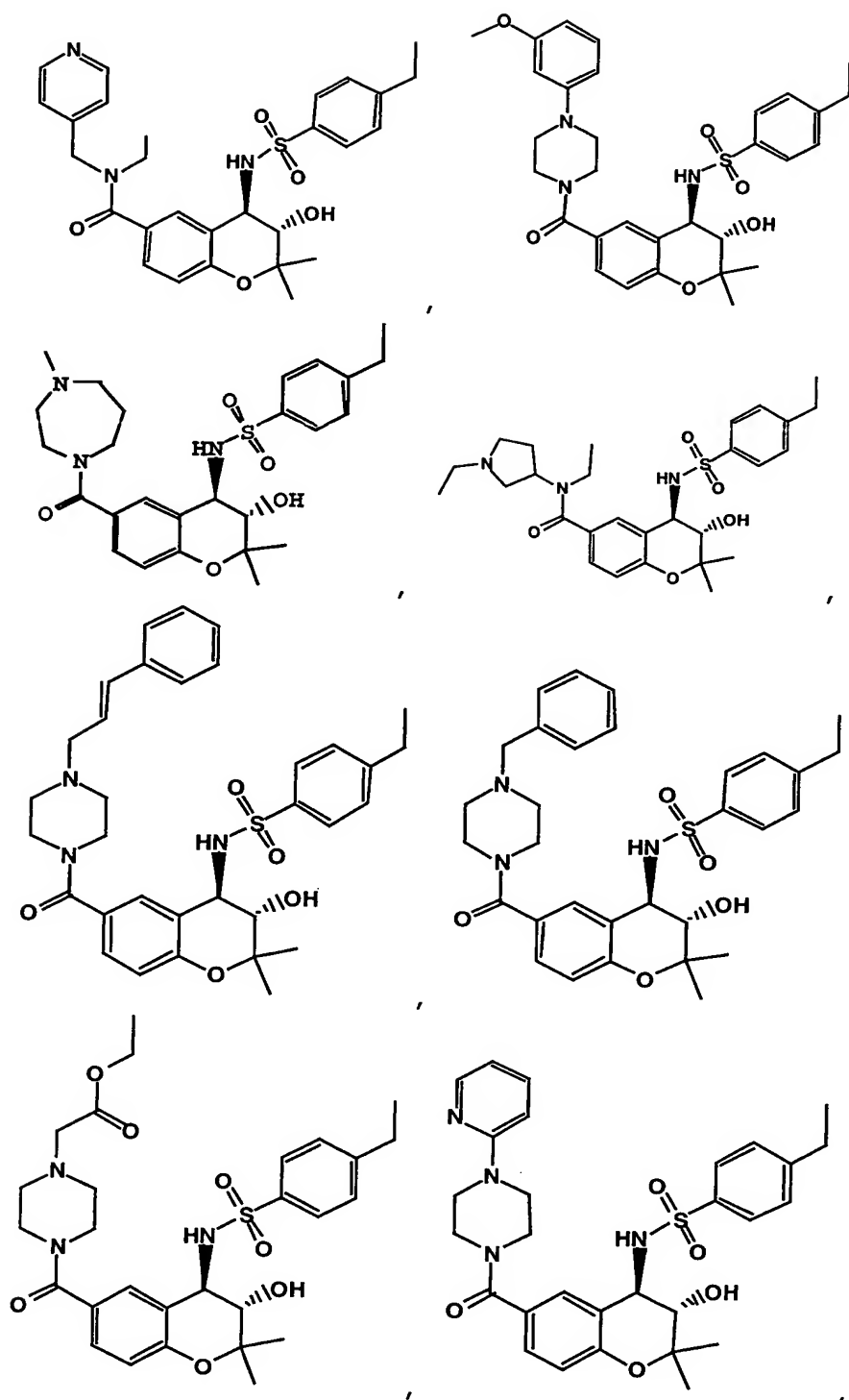


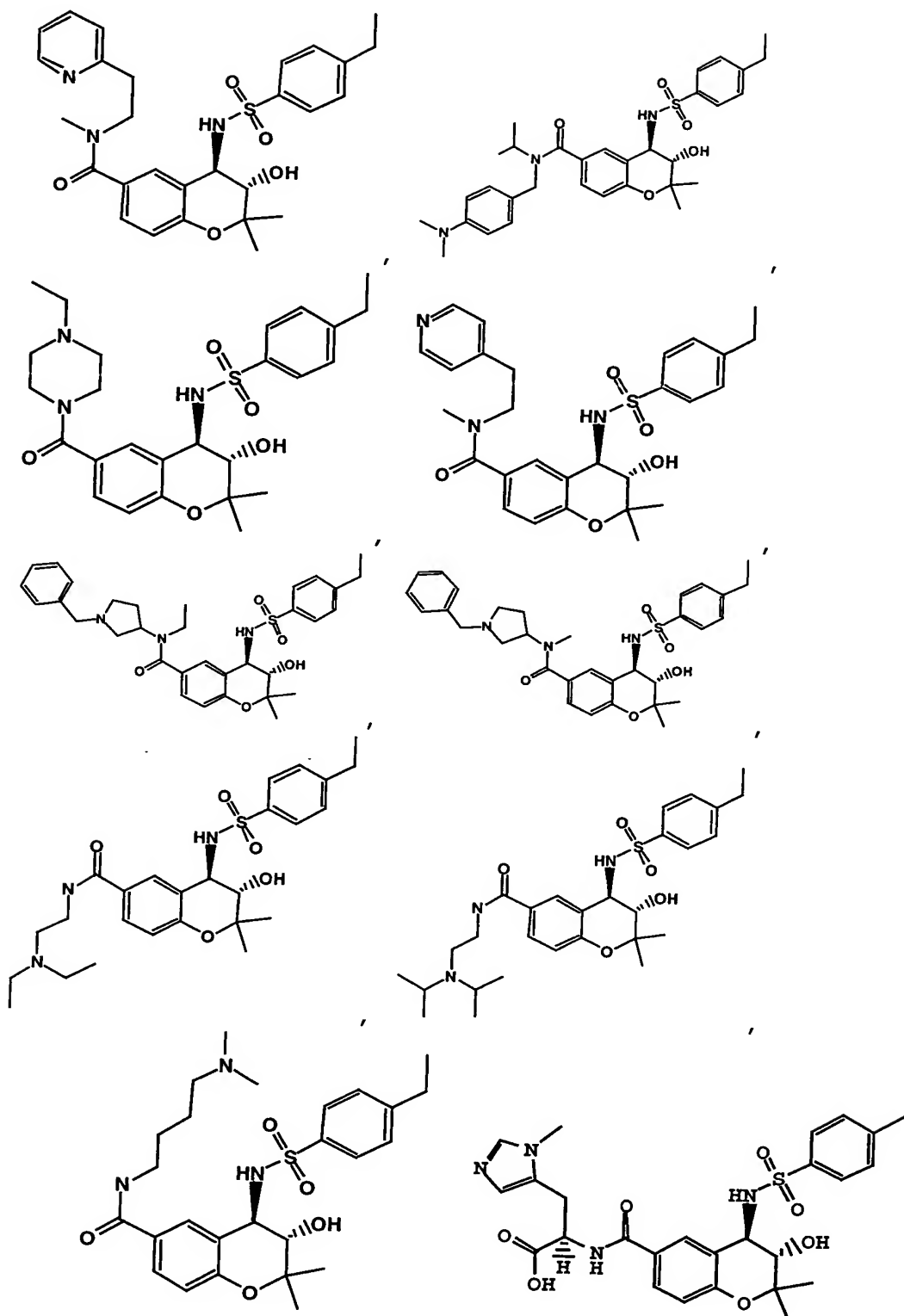


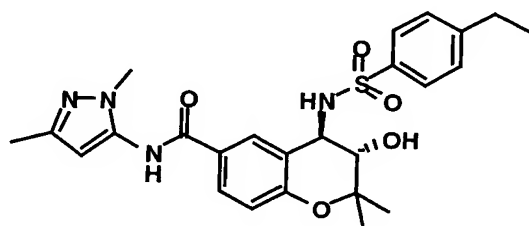
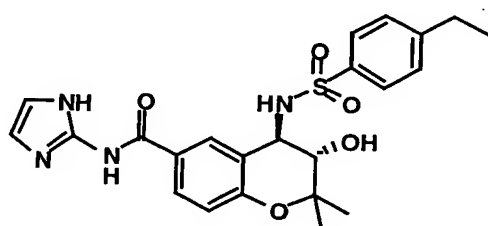
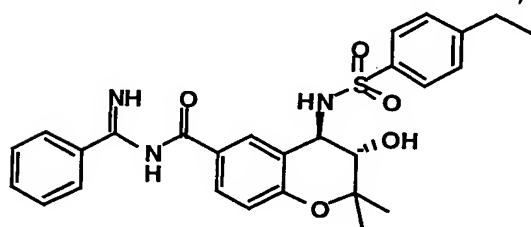
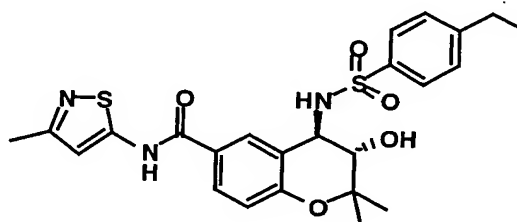
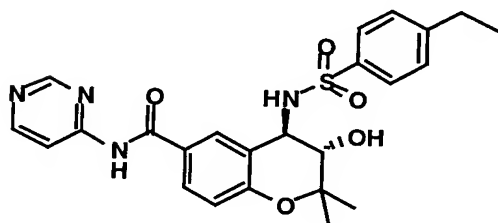
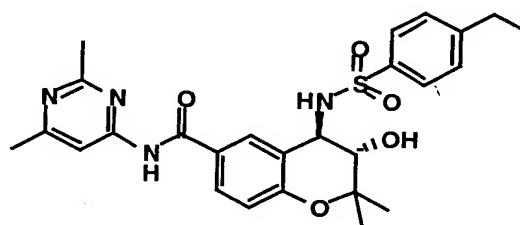
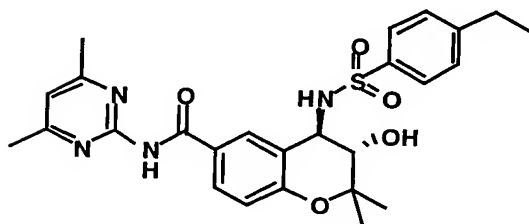
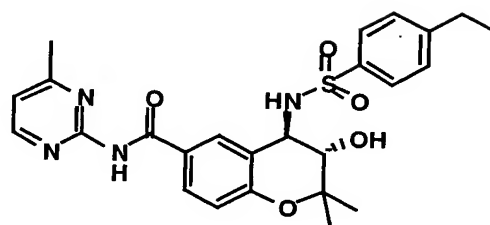
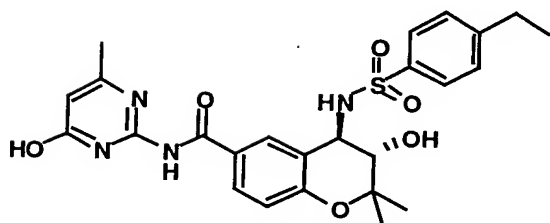
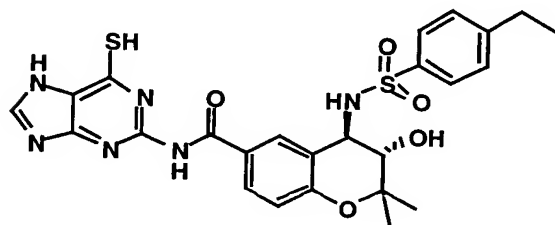
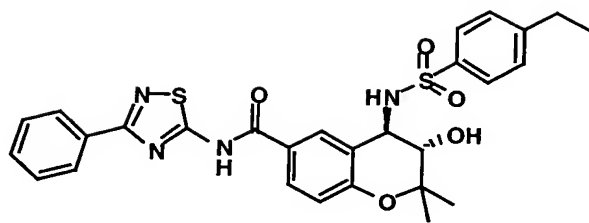


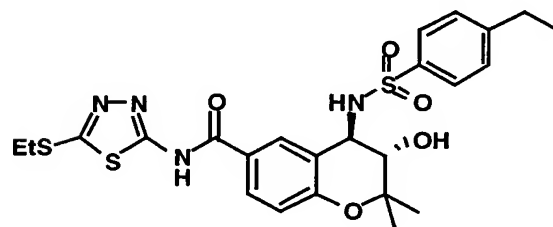
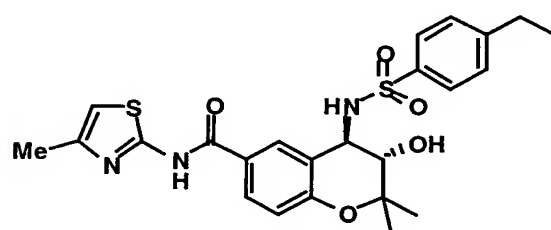
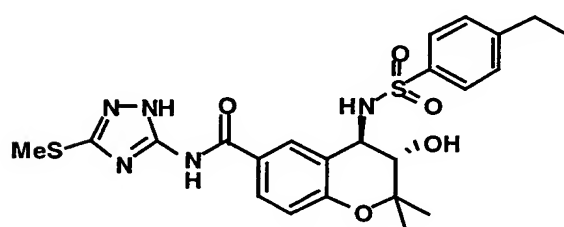
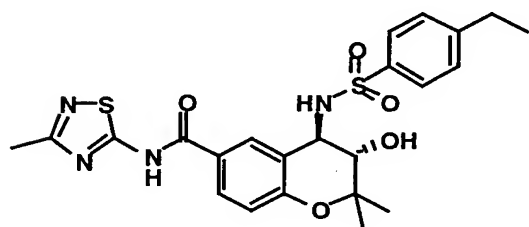
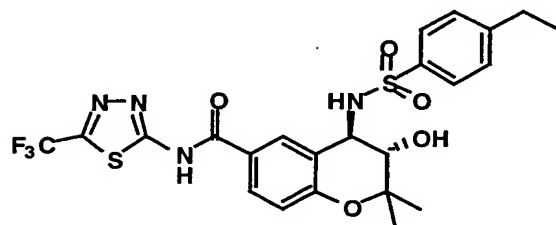
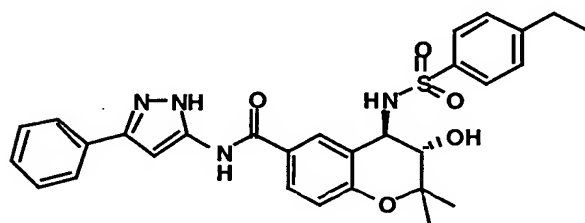
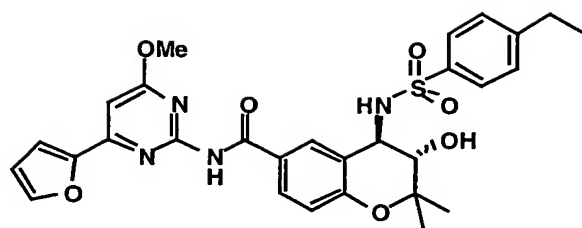


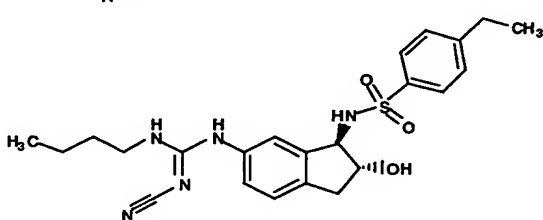
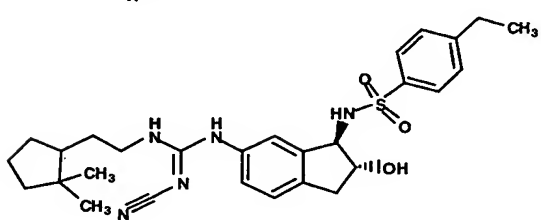
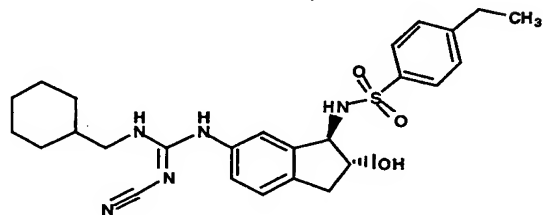
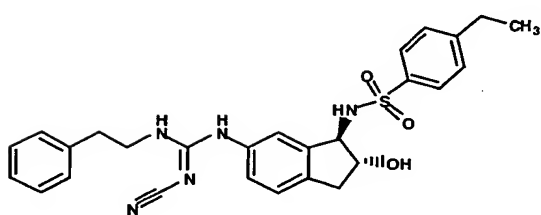
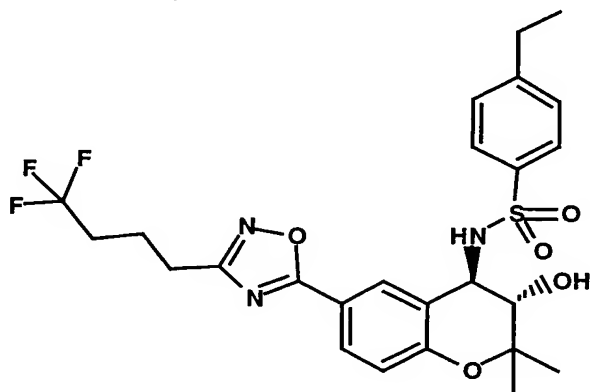
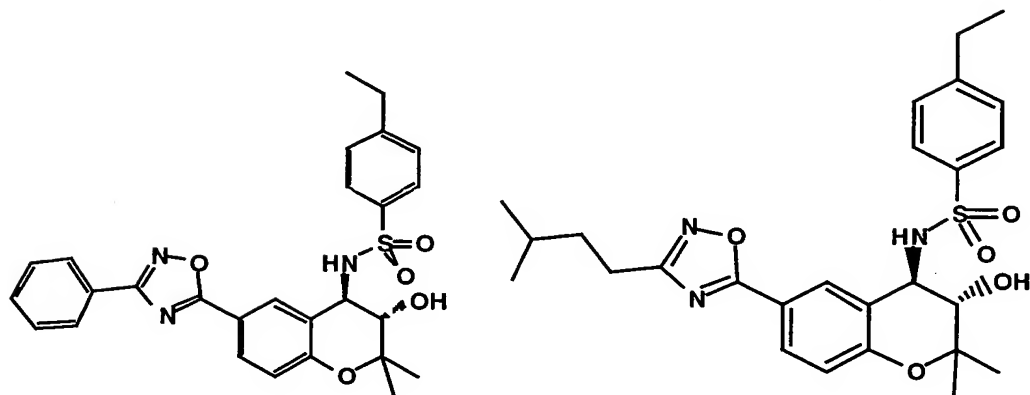
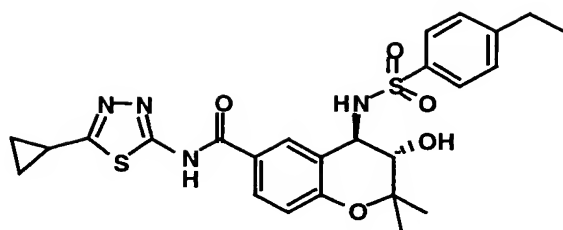


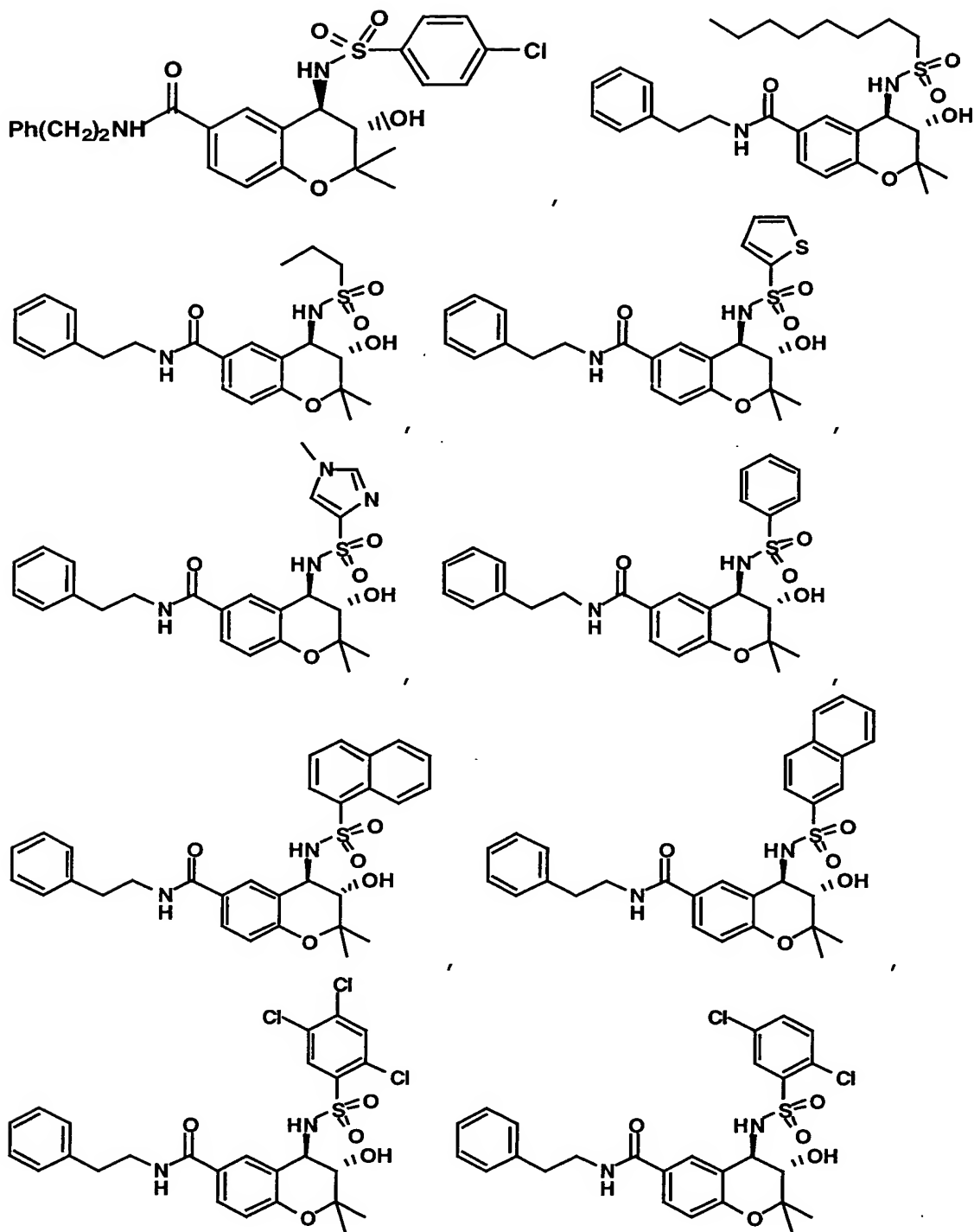


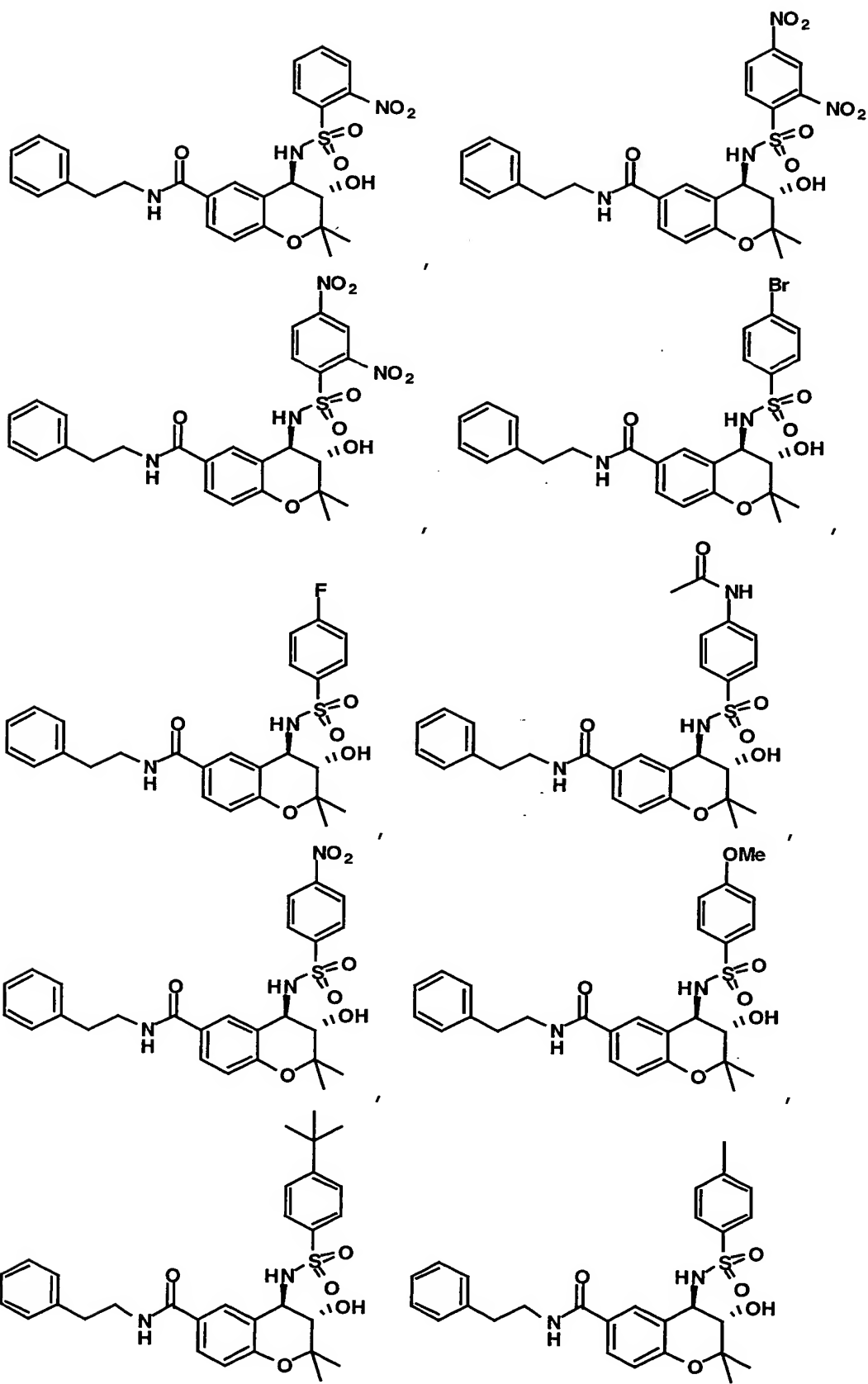


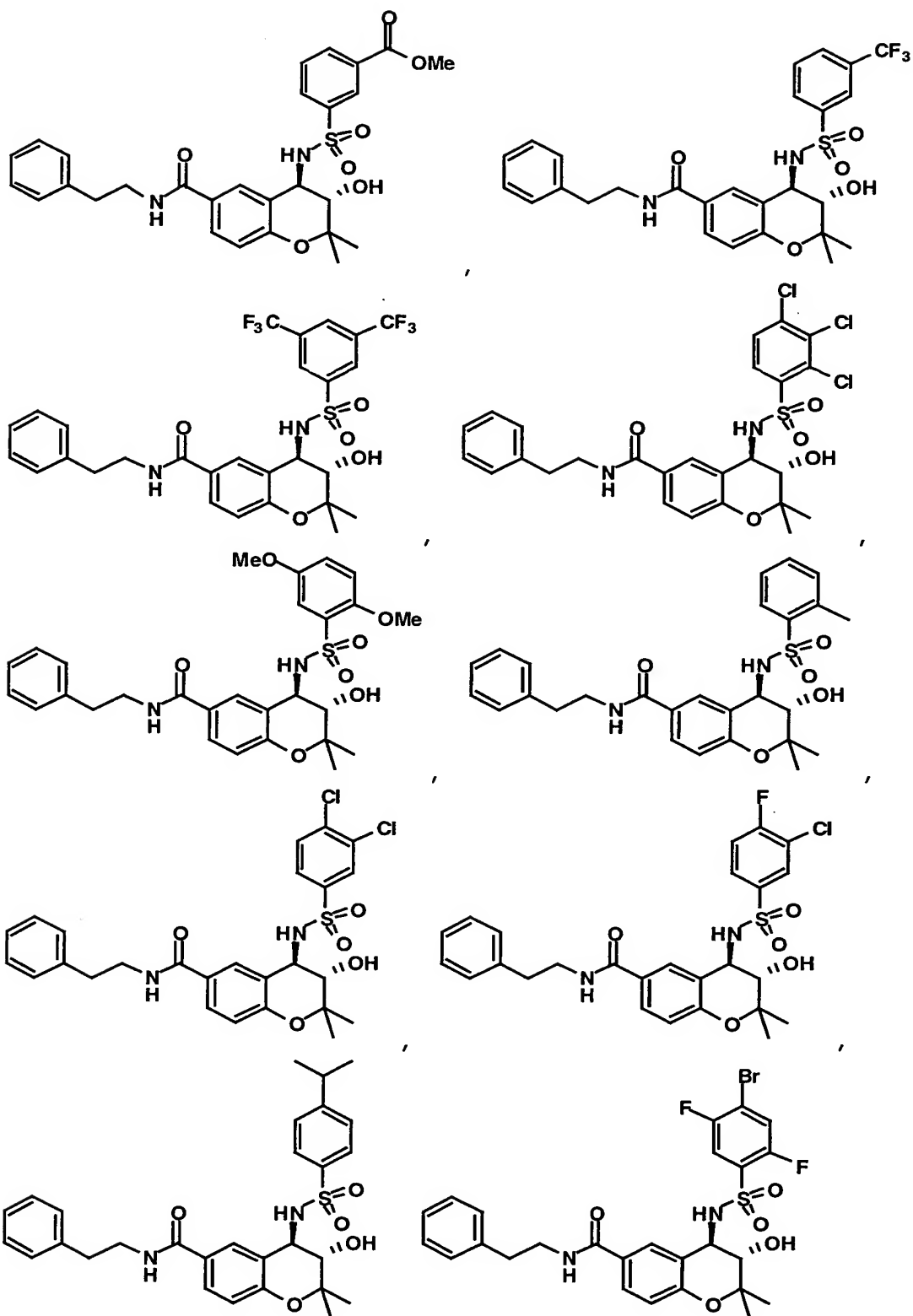


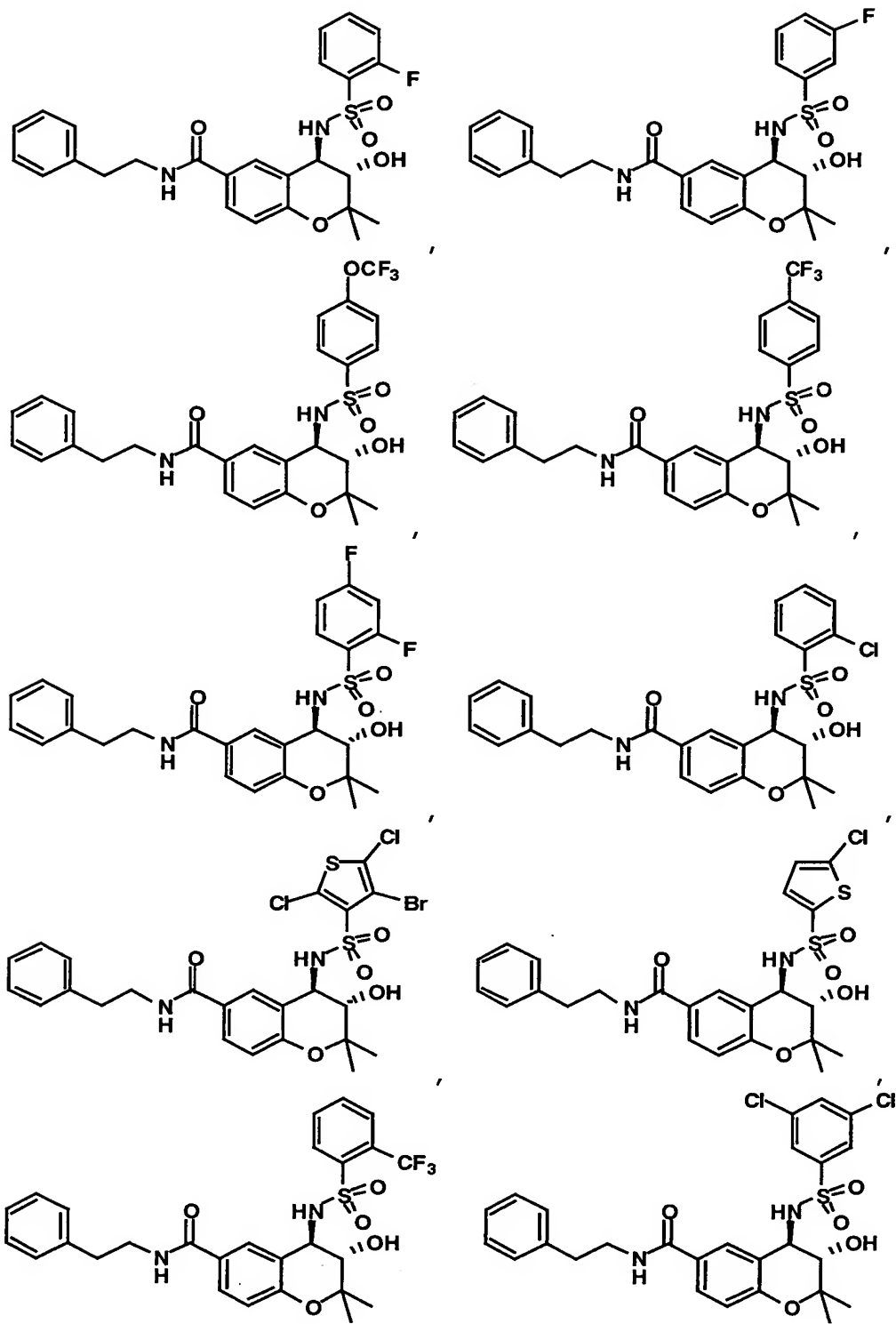


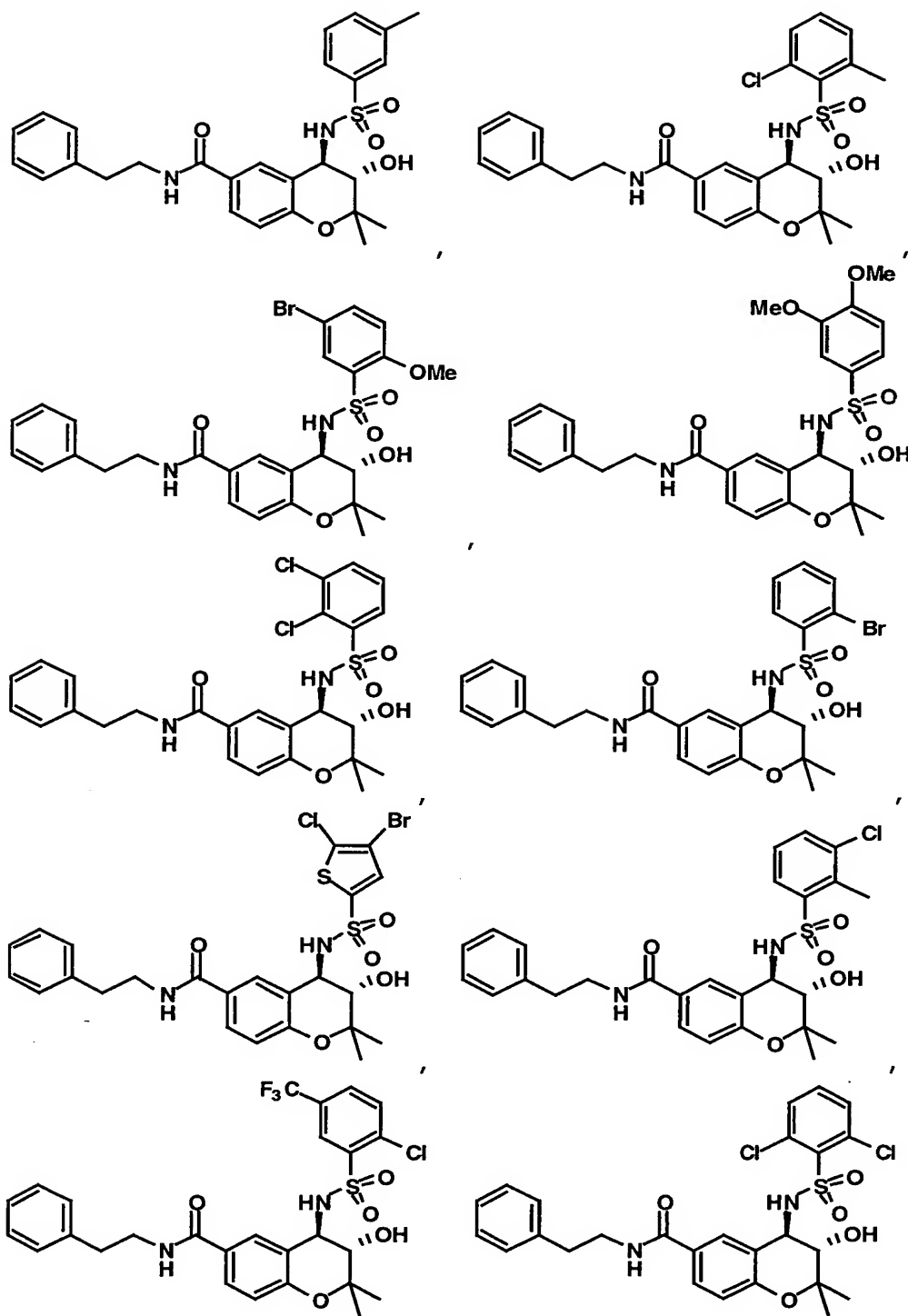


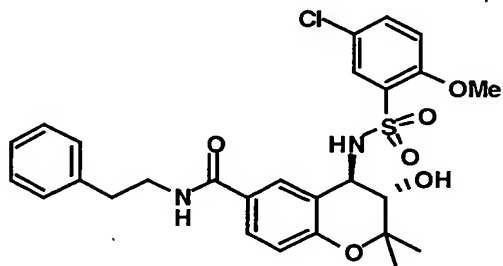
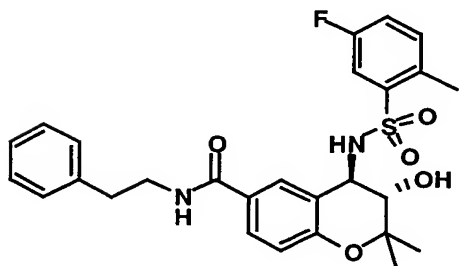
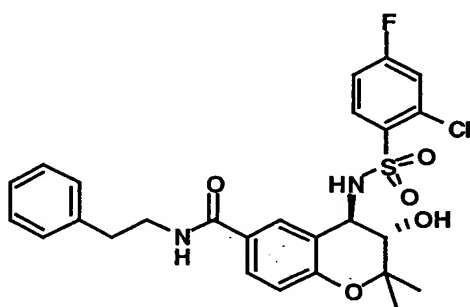
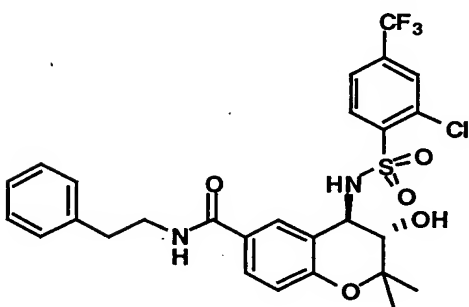
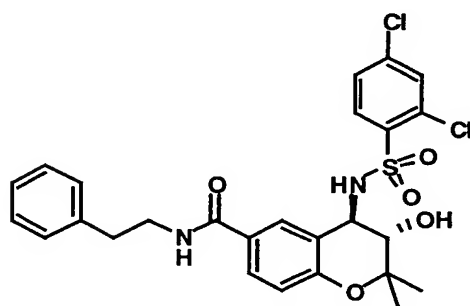
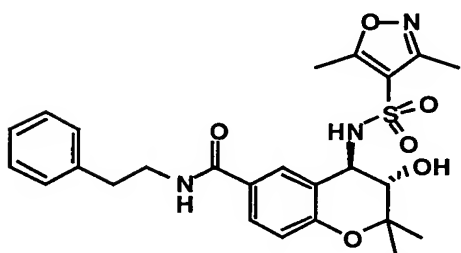
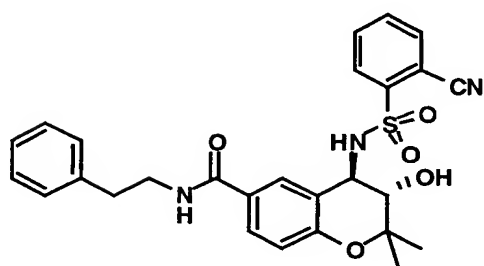
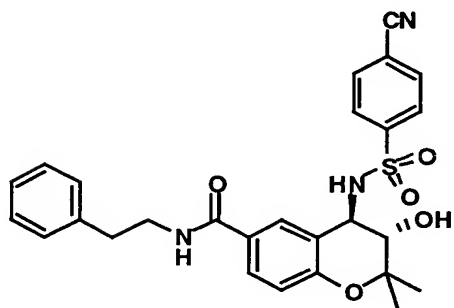
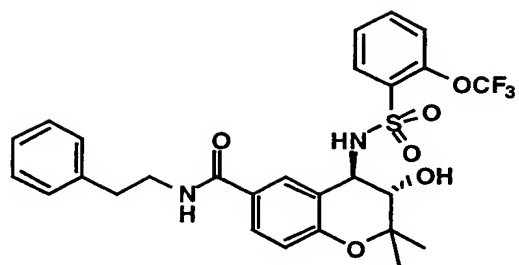
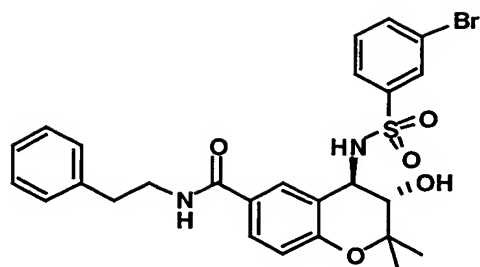


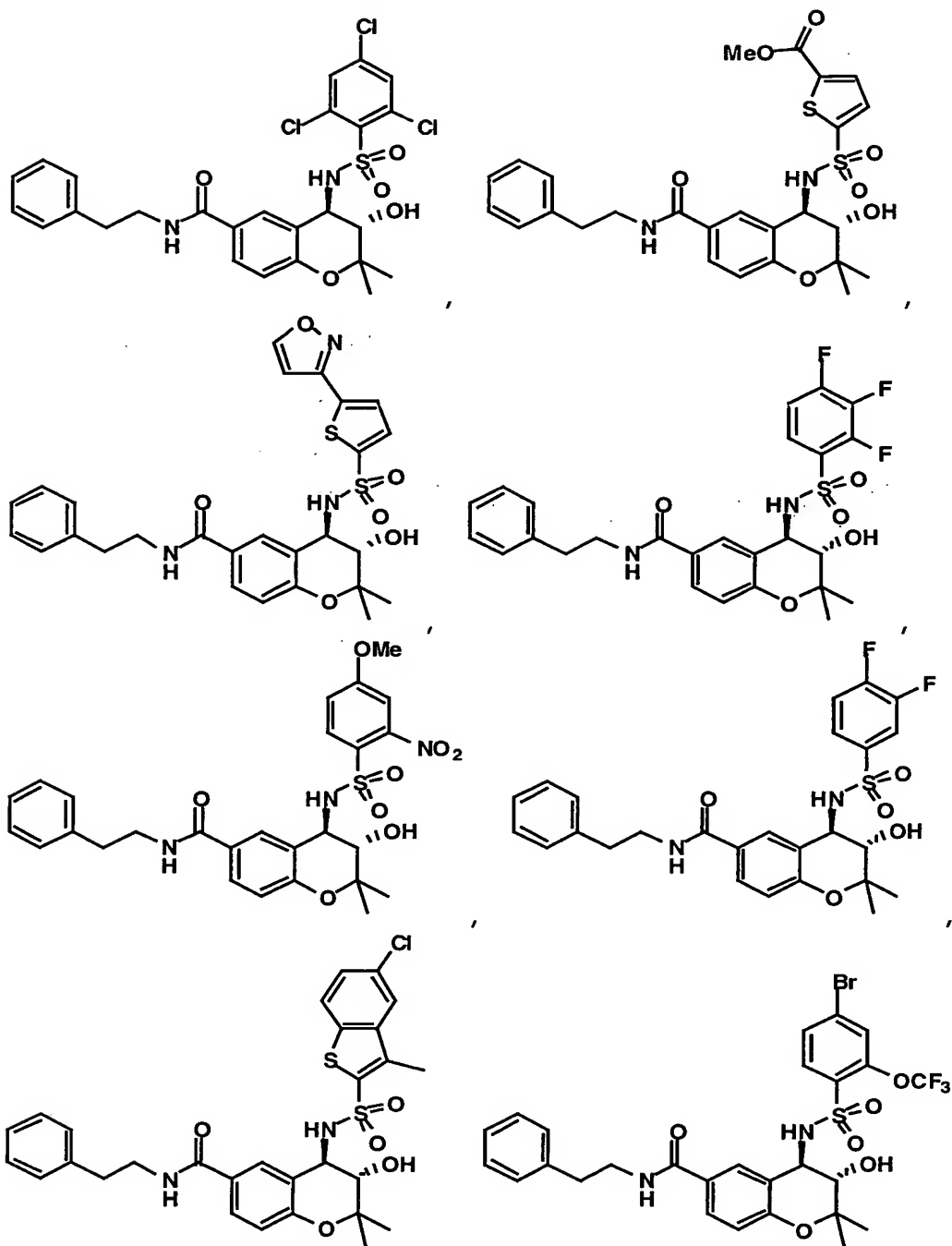


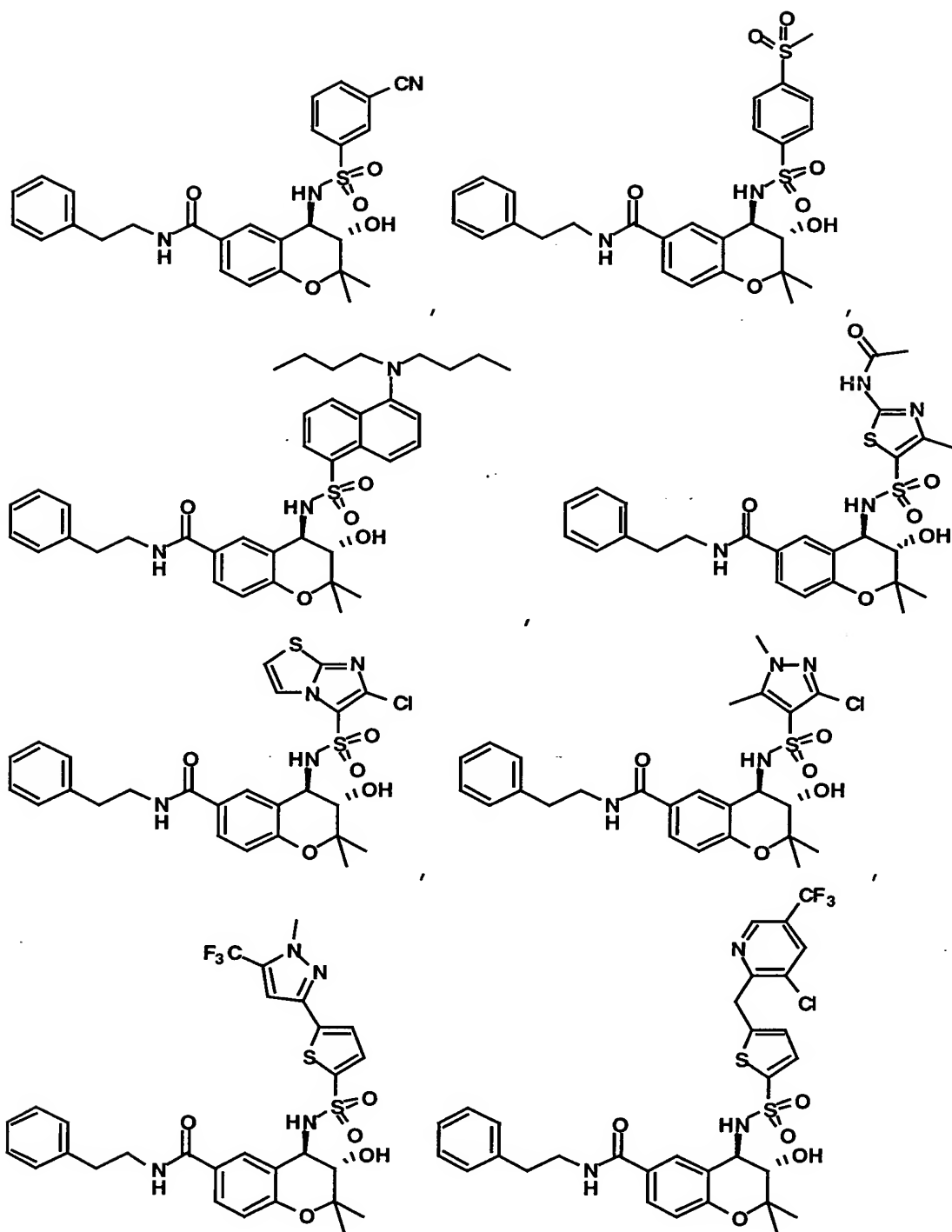


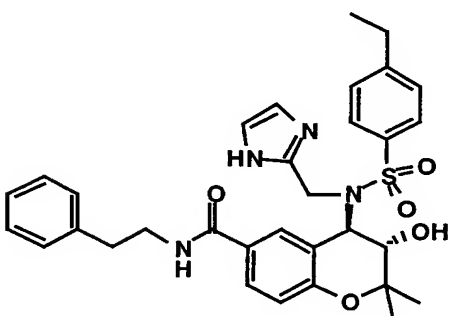
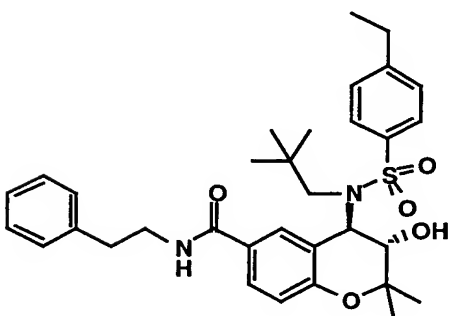
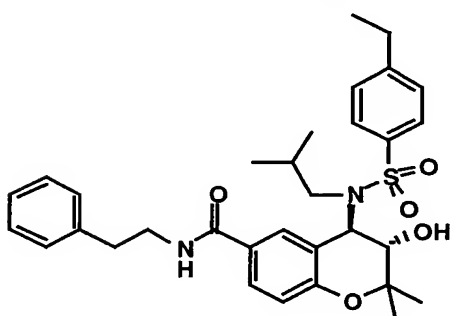
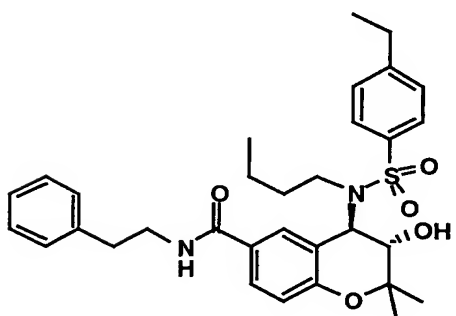
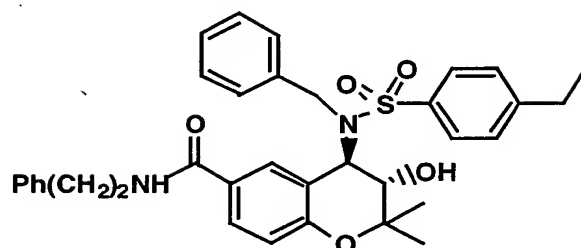
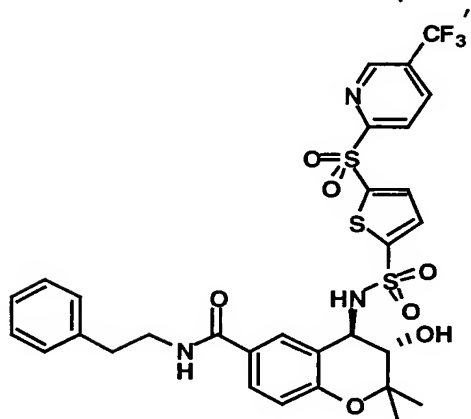
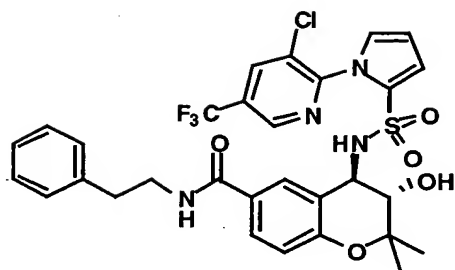
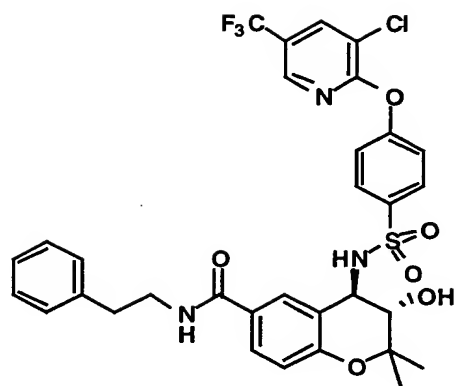


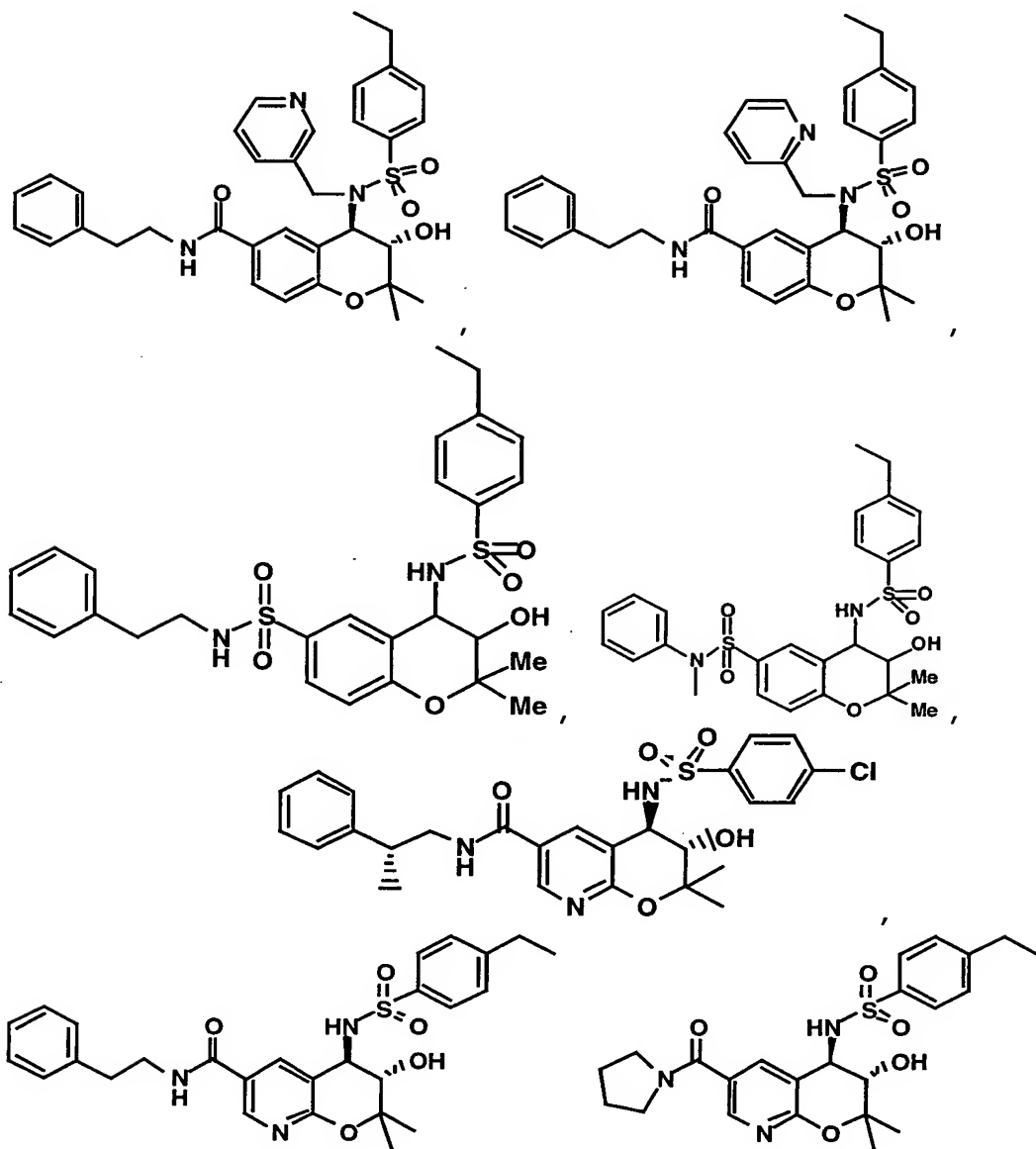


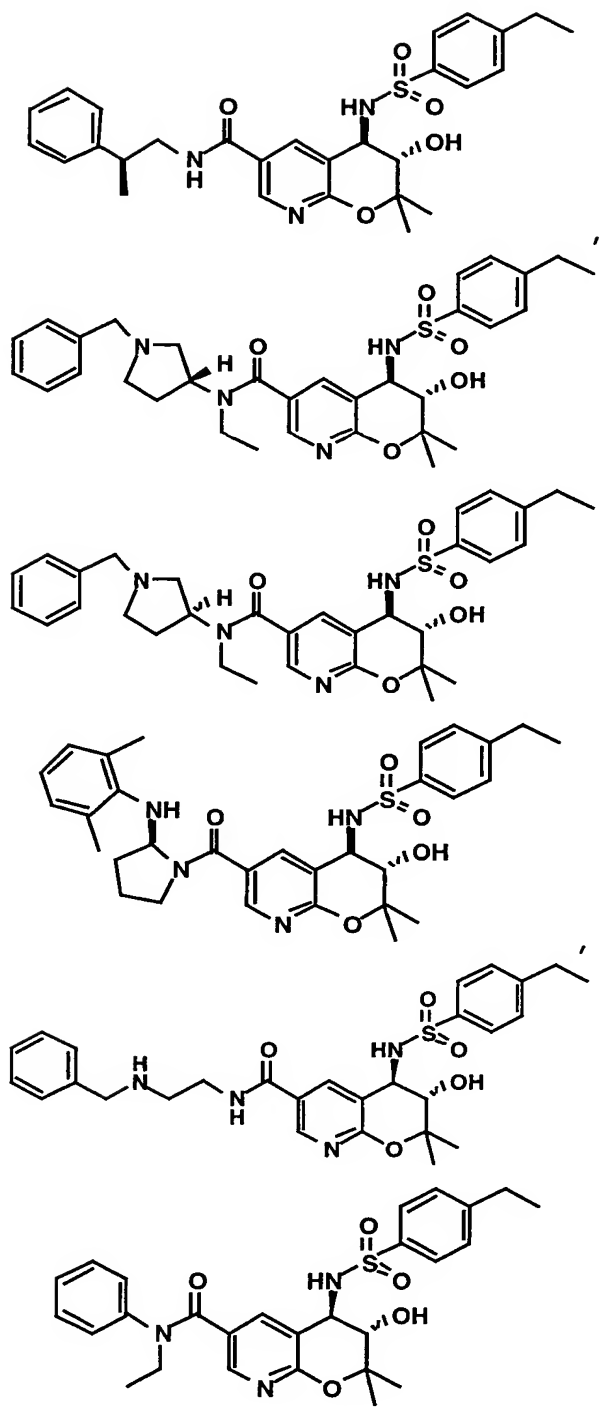


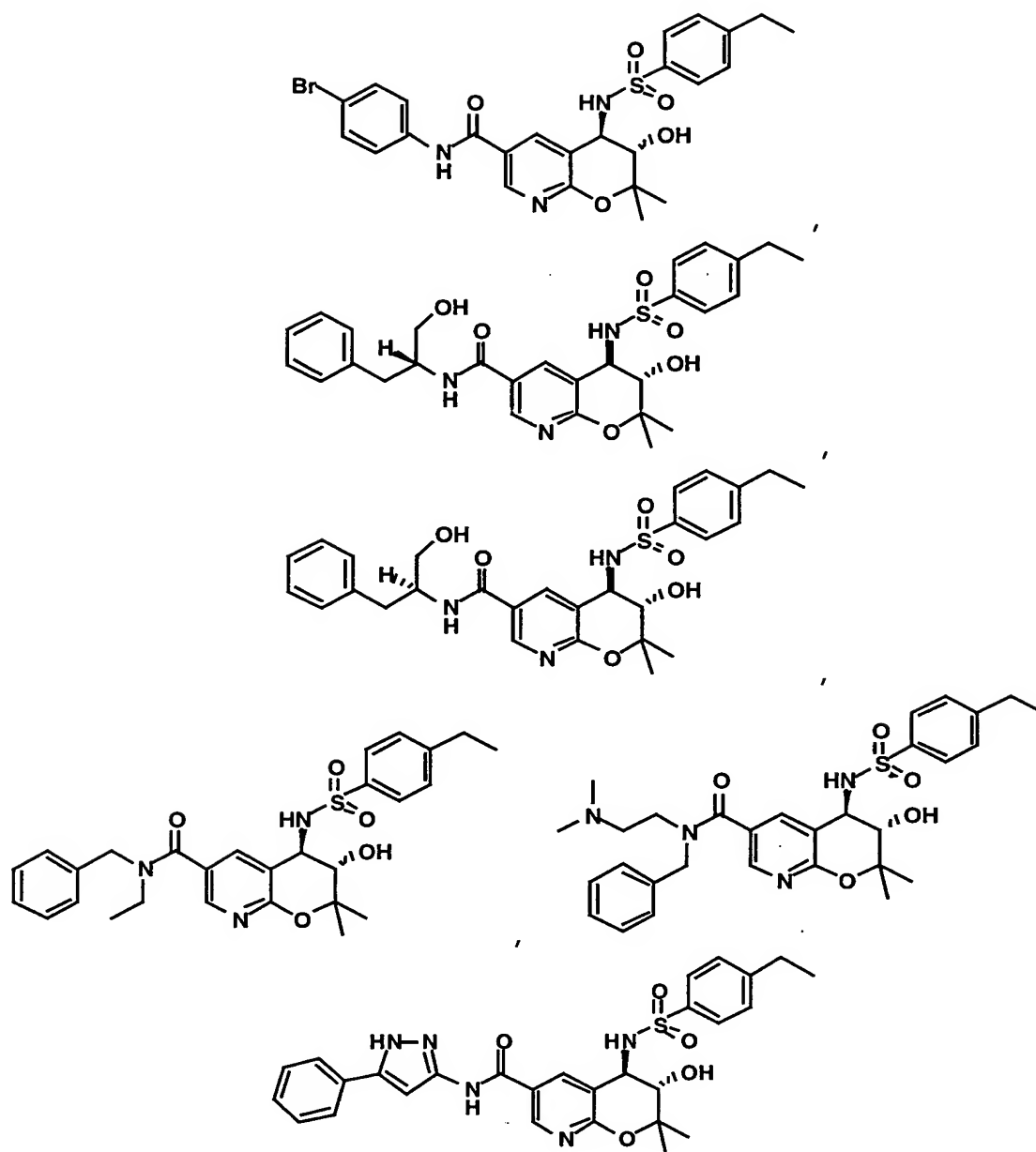






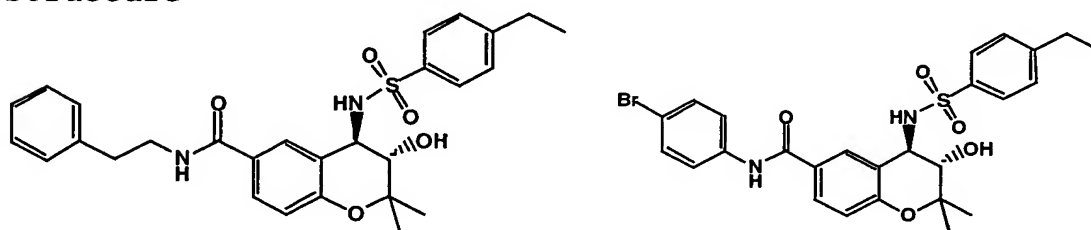


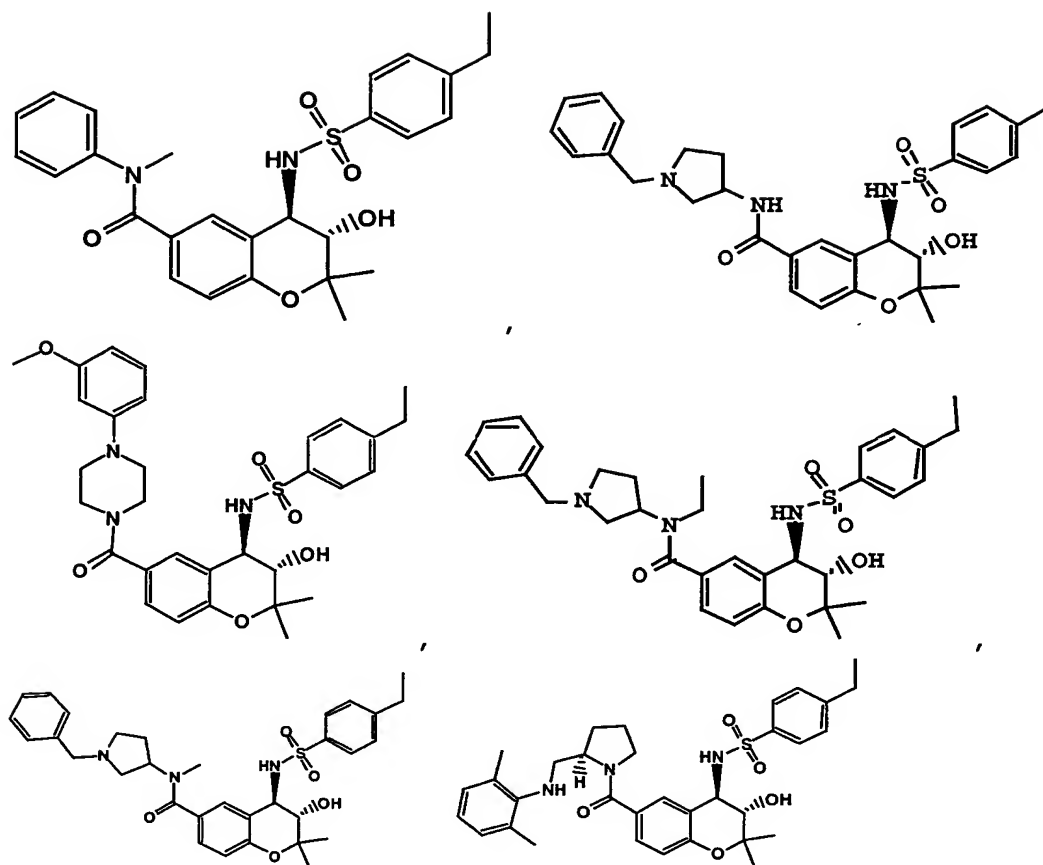




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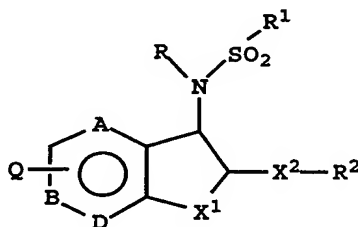
13. The compound as defined in Claim 1 having the structure





14. A pharmaceutical composition comprising a
5 compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.

15. A method for preventing or treating cardiac arrhythmia, which comprises administering to a mammalian species in need of treatment a therapeutically effective
10 amount of a compound which has the structure



including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof,
15 wherein

A, B and D are independently selected from CH or N;

X^1 is $\begin{array}{c} R^3 \\ | \\ (C)_n \\ | \\ R^4 \end{array}$ (where n is 1, 2 or 3),

O , NR^5 , S , SO , SO_2 , $-O-\begin{array}{c} R^3 \\ | \\ C \\ | \\ R^4 \end{array}$, $-\begin{array}{c} R^3 \\ | \\ N \\ | \\ R^5 \end{array}-\begin{array}{c} R^3 \\ | \\ C \\ | \\ R^4 \end{array}$, $-\begin{array}{c} R^3 \\ | \\ S \\ | \\ R^4 \end{array}$,
 $-\begin{array}{c} O \\ || \\ S \end{array}-\begin{array}{c} R^3 \\ | \\ C \\ | \\ R^4 \end{array}$ or $-\begin{array}{c} O \\ || \\ S \\ || \\ O \end{array}-\begin{array}{c} R^3 \\ | \\ C \\ | \\ R^4 \end{array}$, wherein the heteroatom in each of the

above groups is linked to the aromatic ring;

5 (where R^3 and R^4 are independently H, alkyl, arylalkyl or cycloalkyl, or R^3 and R^4 can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R^5 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

10 R is H, alkyl, alkenyl, aryl, arylalkyl, heterocycloalkyl, cycloalkyl, or cycloalkylalkyl;

R^1 is alkyl, arylalkyl, aryl, alkenyl,

heterocyclo, heterocycloalkyl, $-\begin{array}{c} N \\ | \\ R^{5a} \end{array}$ -heterocycle (where R^{5a}

15 can be any of the R^5 groups), cycloalkyl, cycloalkylalkyl or $-\begin{array}{c} R^6 \\ | \\ N \end{array}-R^7$ (where R^6 and R^7 are independently selected from H, aryl, alkyl, arylalkyl or cycloalkyl, or R^6 and R^7 can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R^1 can
 20 be taken together with the -N-S- atoms to form a 5- to 8-membered ring;

X^2 is a bond, $-\begin{array}{c} N \\ | \\ R^8 \end{array}-$ or $-O-$ (where R^8 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

25 R^2 is H, alkyl, arylalkyl,

$-\begin{array}{c} O \\ || \\ C \end{array}$ -alkyl, $-\begin{array}{c} O \\ || \\ C \end{array}$ -arylalkyl, $-\begin{array}{c} O \\ || \\ CH_2 \end{array}-C(=O)-O-R^{10}$ or $-\begin{array}{c} O \\ || \\ CH_2 \end{array}-C(=O)-\begin{array}{c} N-R^{10} \\ | \\ R^{11} \end{array}$ (where

R^{10} and R^{11} are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R^{10} and R^{11} can be taken together with the nitrogen to which they are attached to
 30 form a 5- to 8-membered ring); and

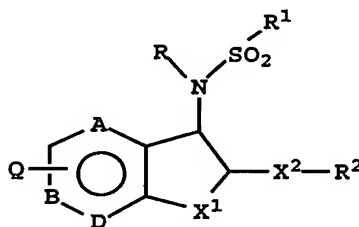
Q is $R^{12}-\overset{\text{H}}{\underset{\text{NC-N}}{\text{C}}}-\text{N}-$, $R^{12}-\overset{\text{O}}{\underset{\text{O}}{\text{C}}}-$, $R^{13}-\overset{\text{O}}{\underset{\text{O}}{\text{S}}}-$ or R^{12} -heterocycle

(where R^{12} is alkyl, arylalkyl, aryl, $-\overset{\text{R}^{15}}{\underset{\text{R}^{16}}{\text{N}}}-$, heterocycle, heterocycloalkyl, $-\overset{\text{R}^{14}}{\text{N}}-\text{heterocycle}$ where R^{14} can be any of the

R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where R^{15} and R^{16} are independently selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or R^{15} and R^{16} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring); and

R^{13} is $-\overset{\text{R}^{15}}{\underset{\text{R}^{16}}{\text{N}}}-$ (wherein this moiety is as defined with respect to R^{12}).

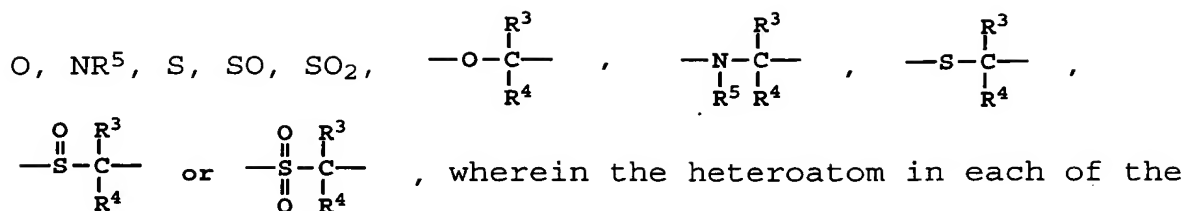
16. A method for preventing or treating atrial arrhythmia, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compound which has the structure



including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof, wherein

A, B and D are independently selected from CH or N;

X^1 is $\overset{\text{R}^3}{\underset{\text{R}^4}{\text{C}}}_n$ (where n is 1, 2 or 3),



above groups is linked to the aromatic ring;

- (where R³ and R⁴ are independently H, alkyl, arylalkyl or cycloalkyl, or R³ and R⁴ can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R⁵ is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

- R is H, alkyl, alkenyl, aryl, arylalkyl, heterocycloalkyl, cycloalkyl, or cycloalkylalkyl;

R¹ is alkyl, arylalkyl, aryl, alkenyl,

heterocycle, heterocycloalkyl, $\text{---}\overset{\overset{\text{R}^{5a}}{|}}{\text{N}}\text{---heterocycle}$ (where R^{5a}

can be any of the R⁵ groups), cycloalkyl, cycloalkylalkyl

- or $\text{---}\overset{\overset{\text{R}^6}{|}}{\text{N}}\text{---R}^7$ (where R⁶ and R⁷ are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R⁶ and R⁷ can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R¹ can be taken together with the -N-S- atoms to form a 5- to 8-membered ring;

X² is a bond, $\text{---}\overset{\overset{\text{R}^8}{|}}{\text{N}}\text{---}$ or -O- (where R⁸ is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R² is H, alkyl, arylalkyl,

- $\text{---}\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---alkyl}$, $\text{---}\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---arylalkyl}$, $\text{---CH}_2\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---O---R}^{10}$ or $\text{---CH}_2\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---}\overset{\overset{\text{R}^{11}}{|}}{\text{N}}\text{---R}^{10}$ (where

R¹⁰ and R¹¹ are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R¹⁰ and R¹¹ can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring); and

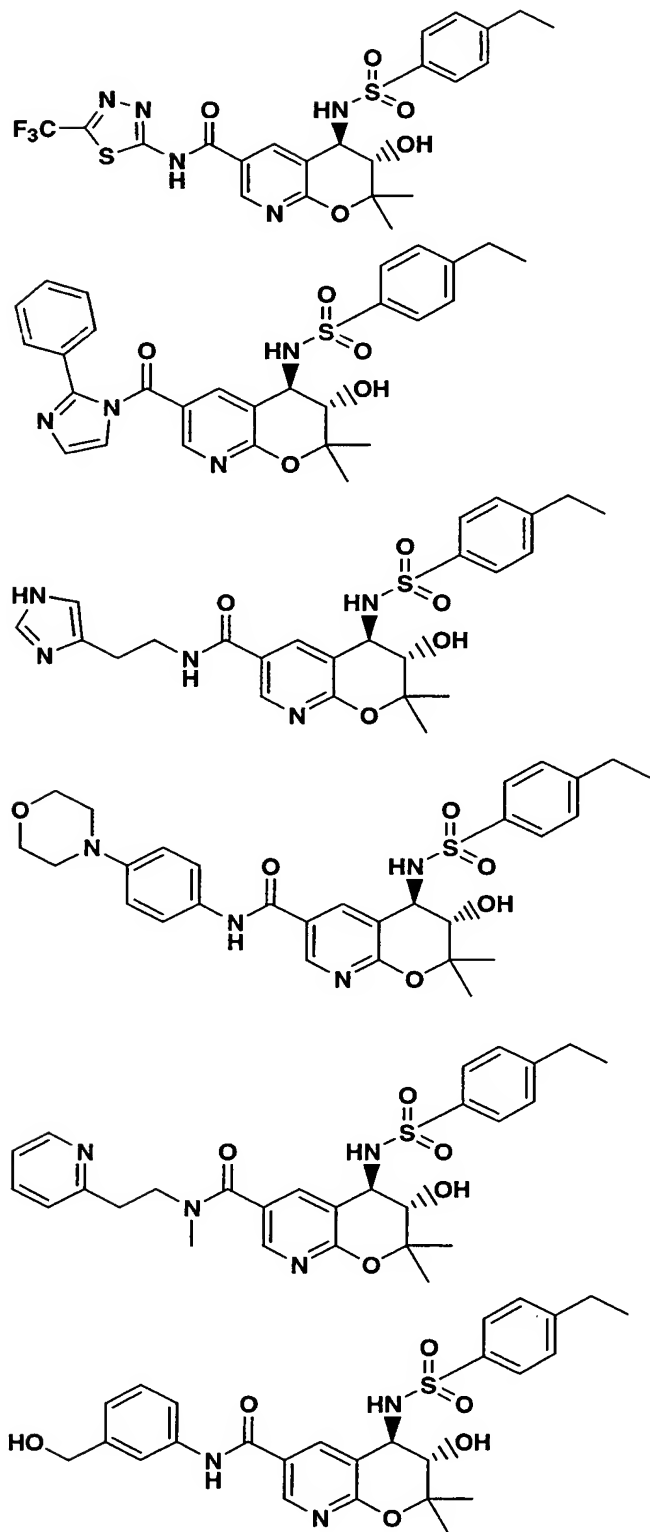
Q is $\text{R}^{12}\text{---}\overset{\overset{\text{H}}{|}}{\underset{\underset{\text{NC---N}}{|}}{\text{C}}}\text{---}$, $\text{R}^{12}\text{---}\overset{\overset{\text{O}}{\parallel}}{\text{C}}\text{---}$, $\text{R}^{13}\text{---}\overset{\overset{\text{O}}{\parallel}}{\underset{\underset{\text{O}}{\parallel}}{\text{S}}}\text{---}$ or R¹²---heterocycle

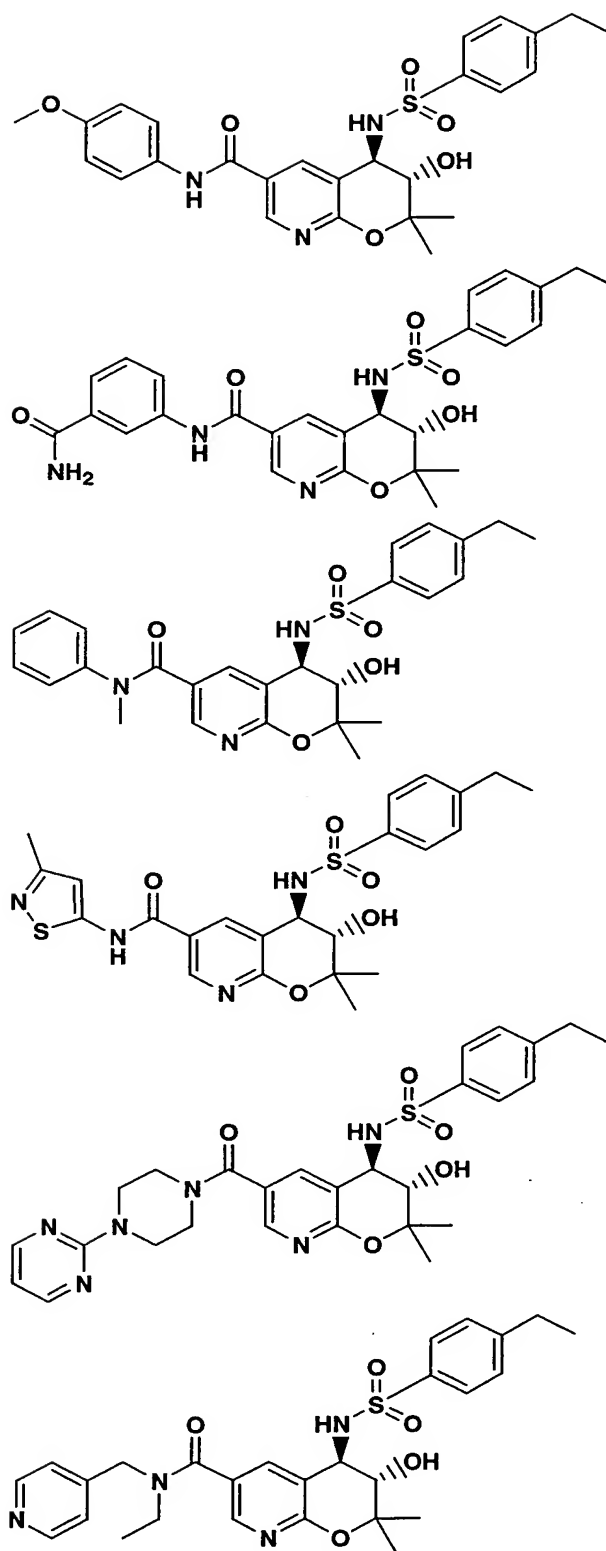
(where R^{12} is alkyl, arylalkyl, aryl, $\begin{smallmatrix} -N-R^{15} \\ | \\ R^{16} \end{smallmatrix}$, heterocycle, heterocycloalkyl, $\begin{smallmatrix} -N-heterocycle \\ | \\ R^{14} \end{smallmatrix}$ where R^{14} can be any of the

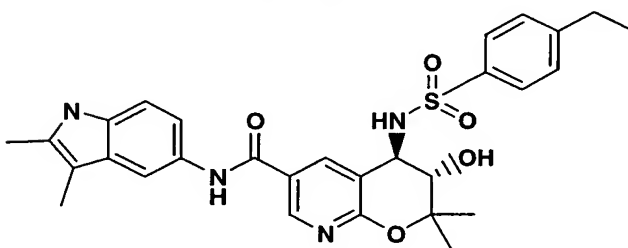
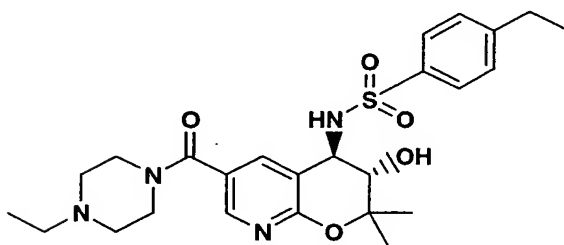
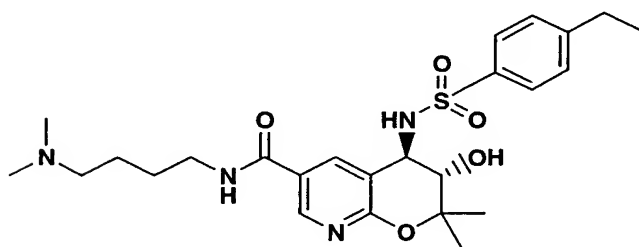
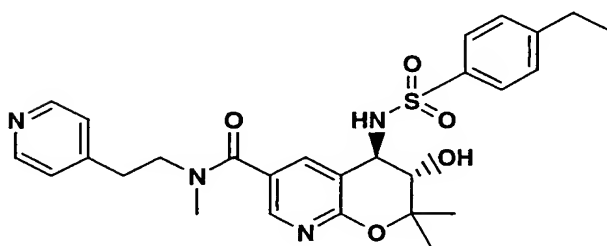
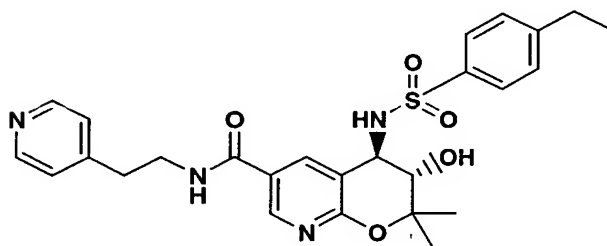
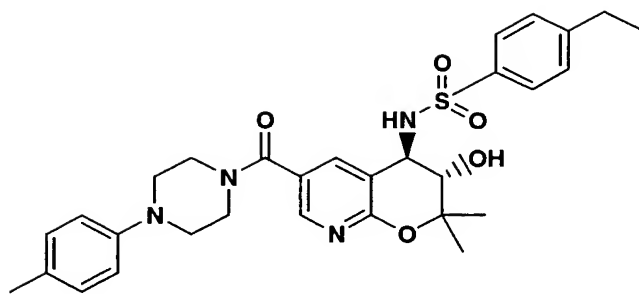
R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where R^{15} and R^{16} are independently
 5 selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or R^{15} and R^{16} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group
 10 or an aminoalkyl group attached to the ring); and

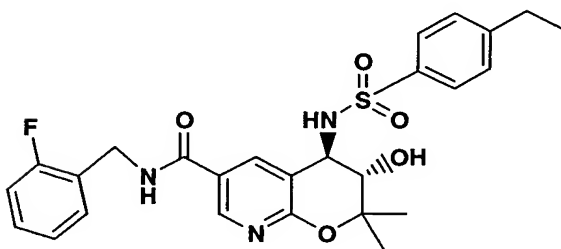
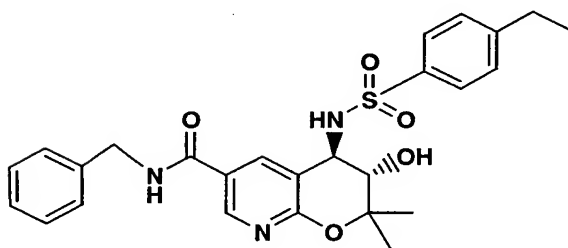
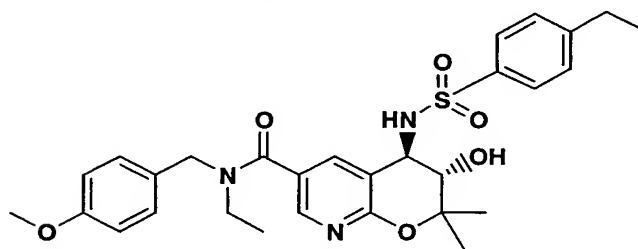
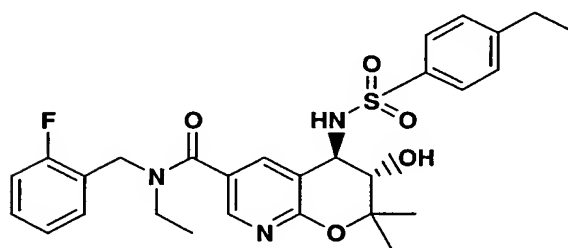
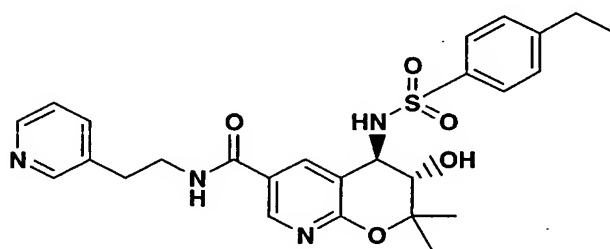
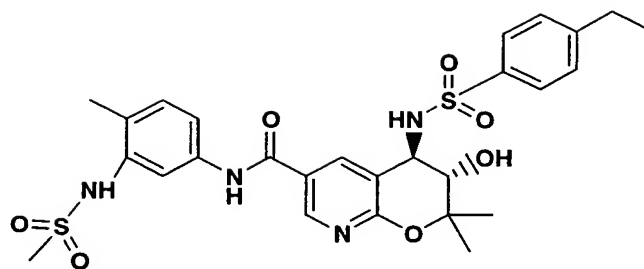
R^{13} is $\begin{smallmatrix} -N-R^{15} \\ | \\ R^{16} \end{smallmatrix}$ (wherein this moiety is as defined with respect to R^{12}).

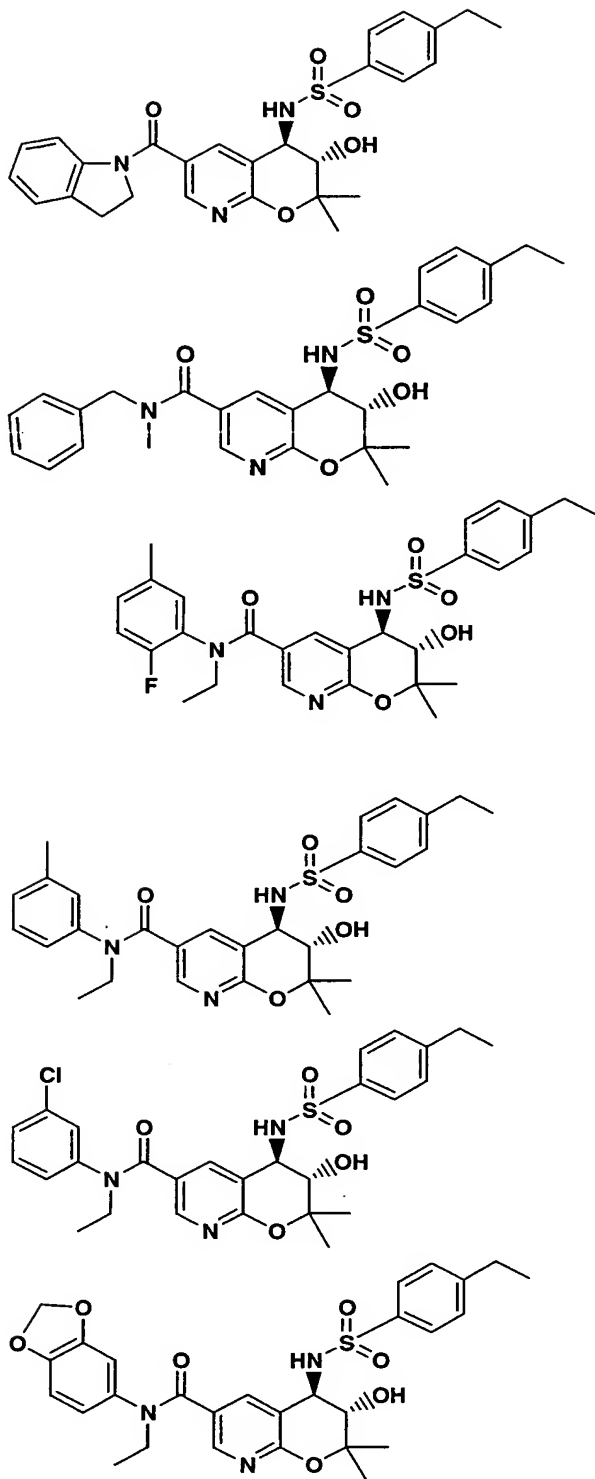
17. The compound as defined in Claim 1 having the structure

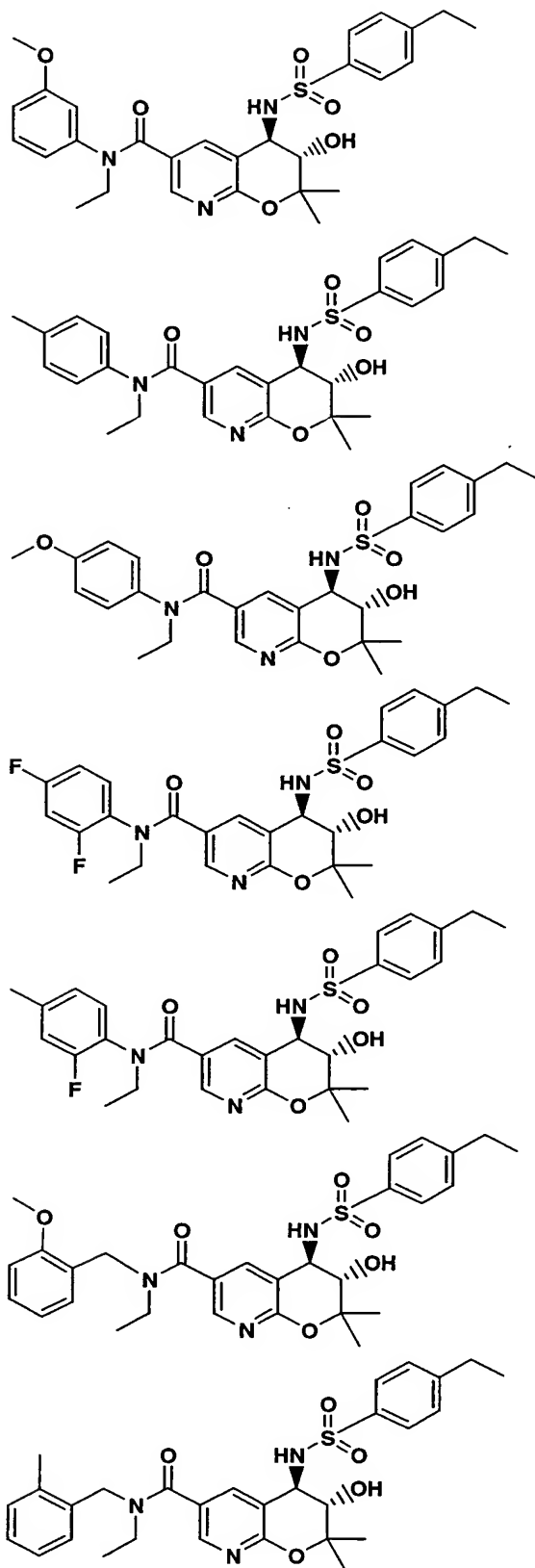


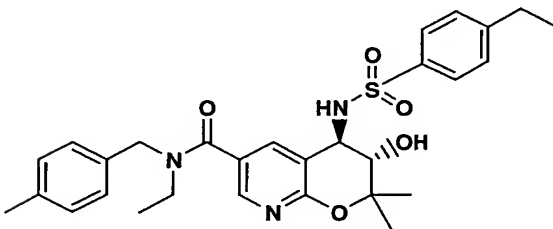
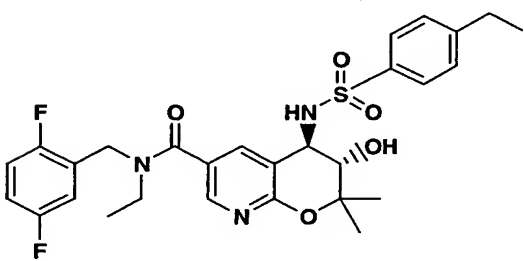
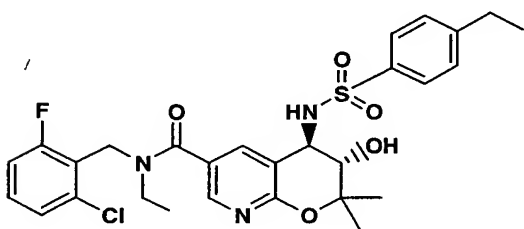
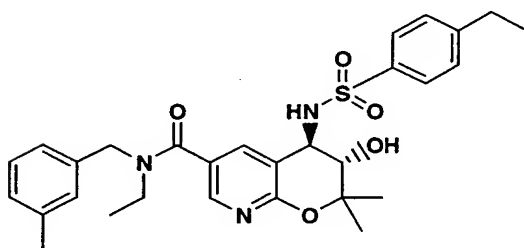
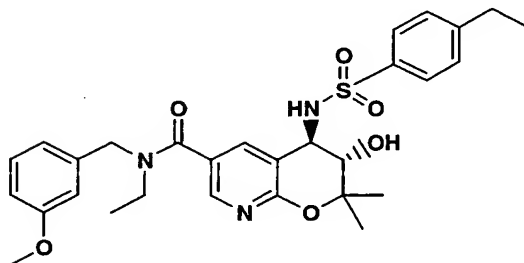
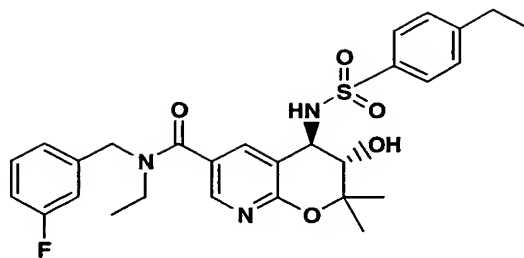


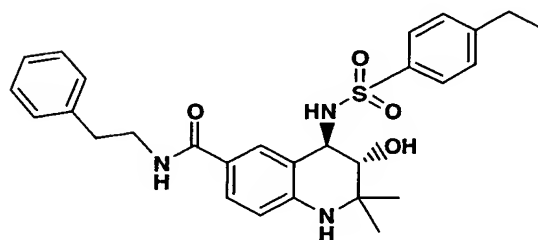
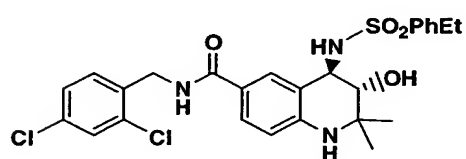
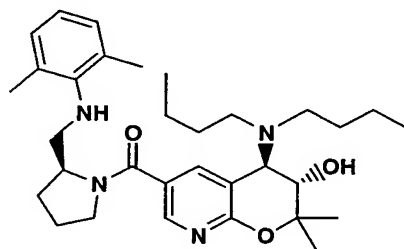
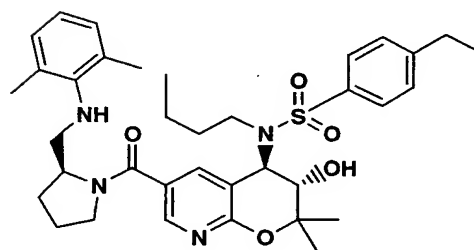
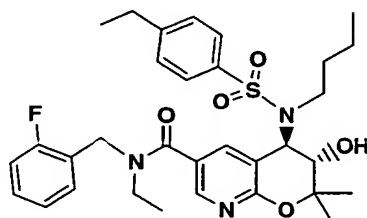
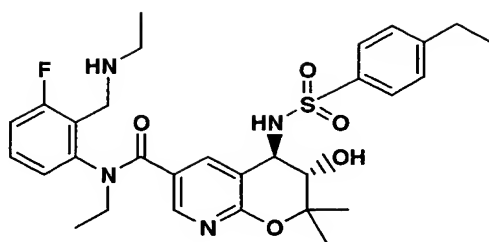


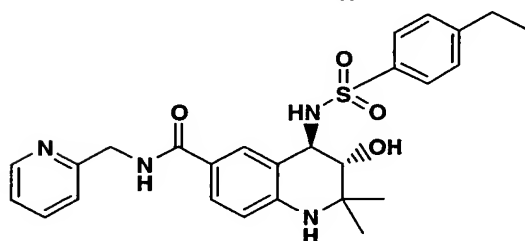
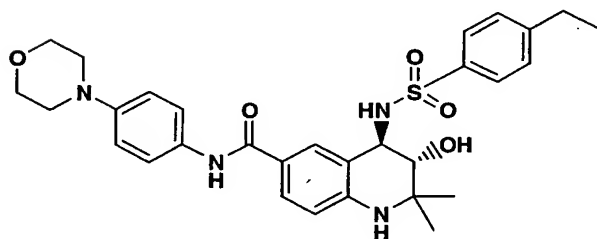
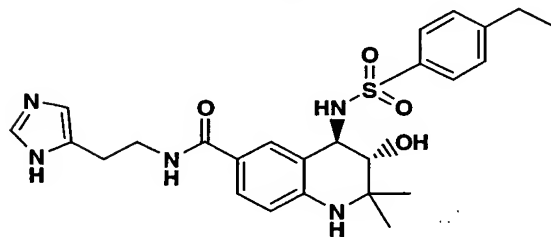
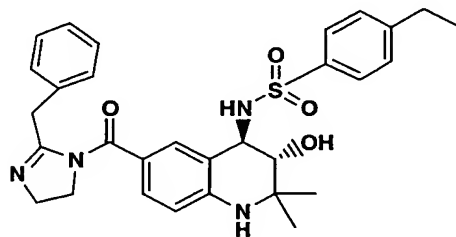
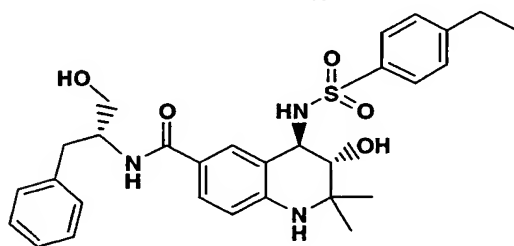
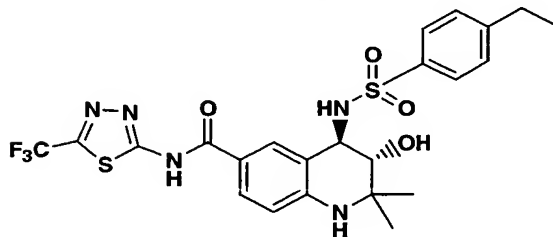
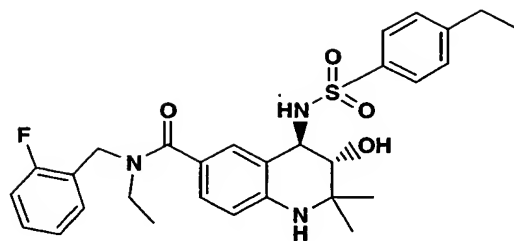


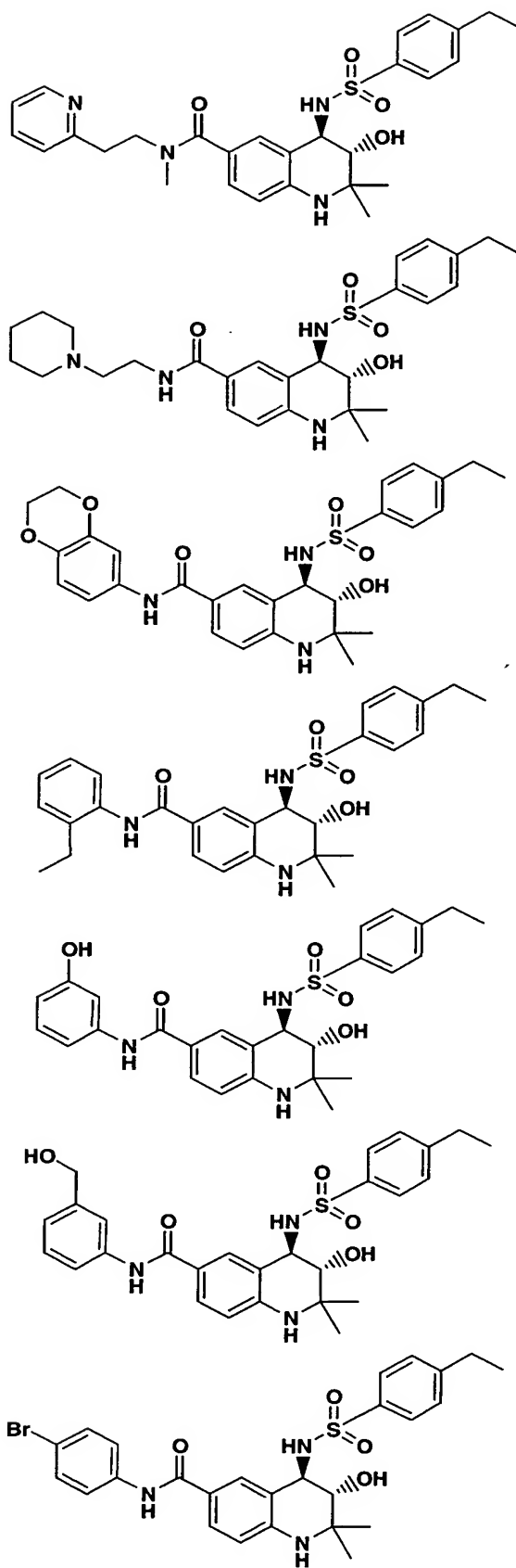


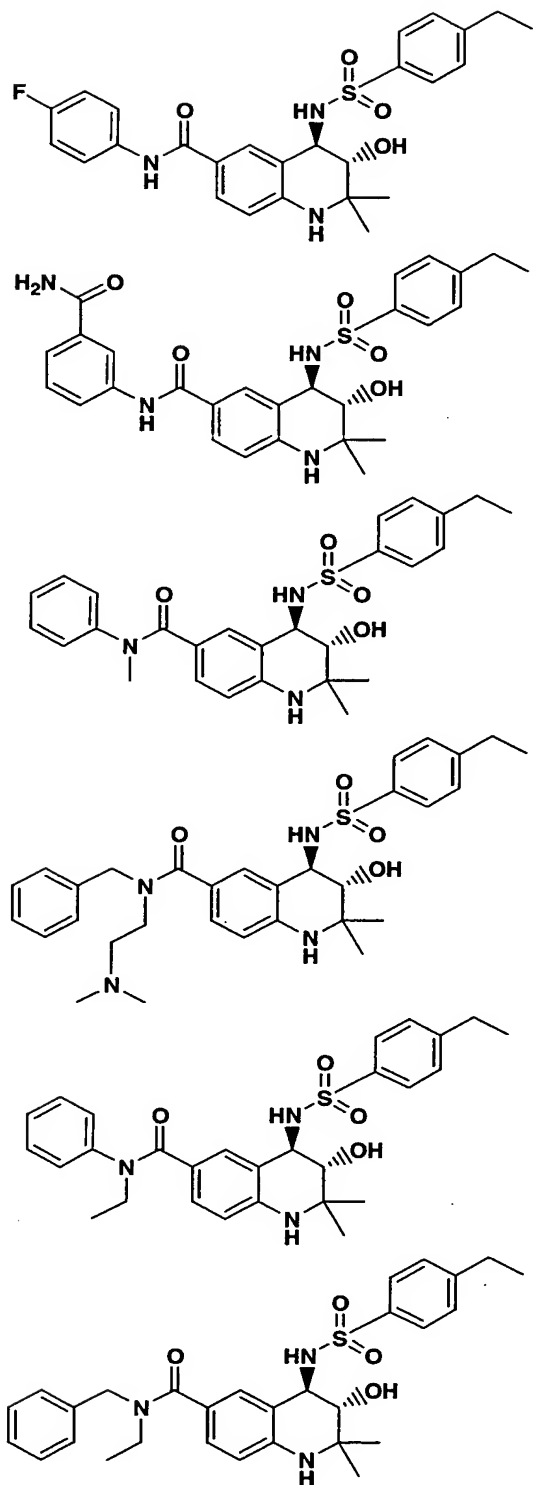


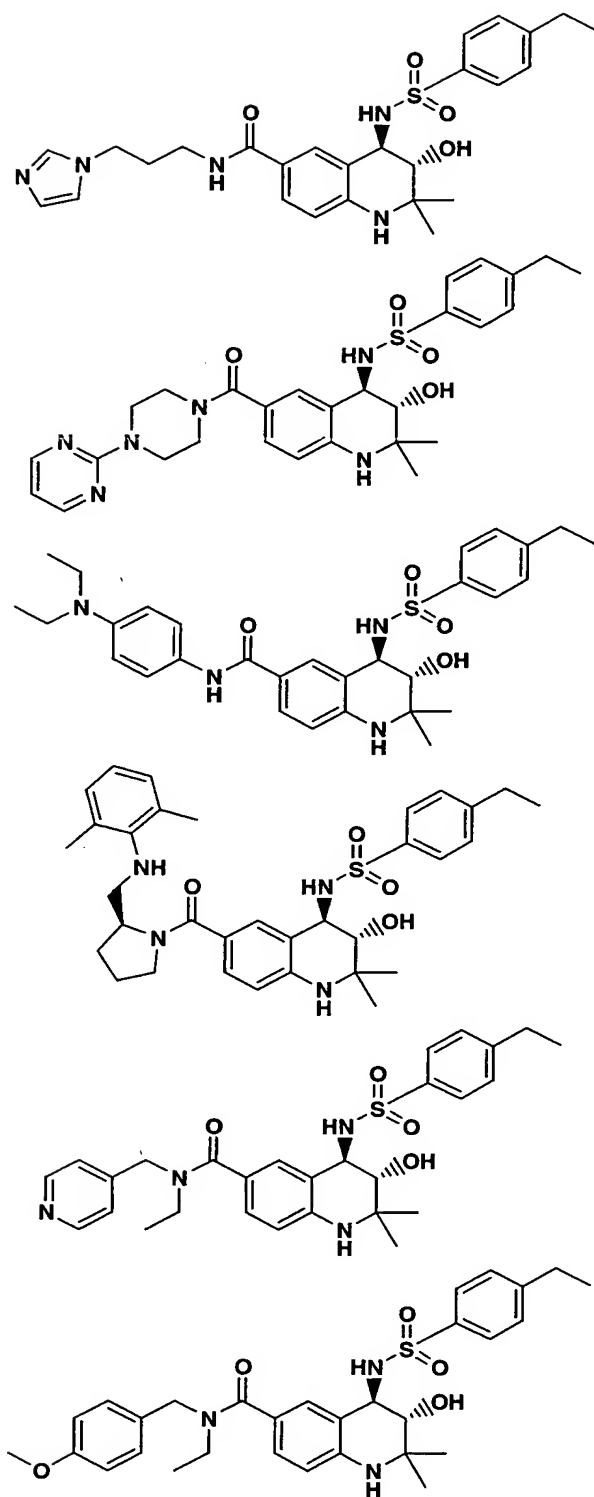


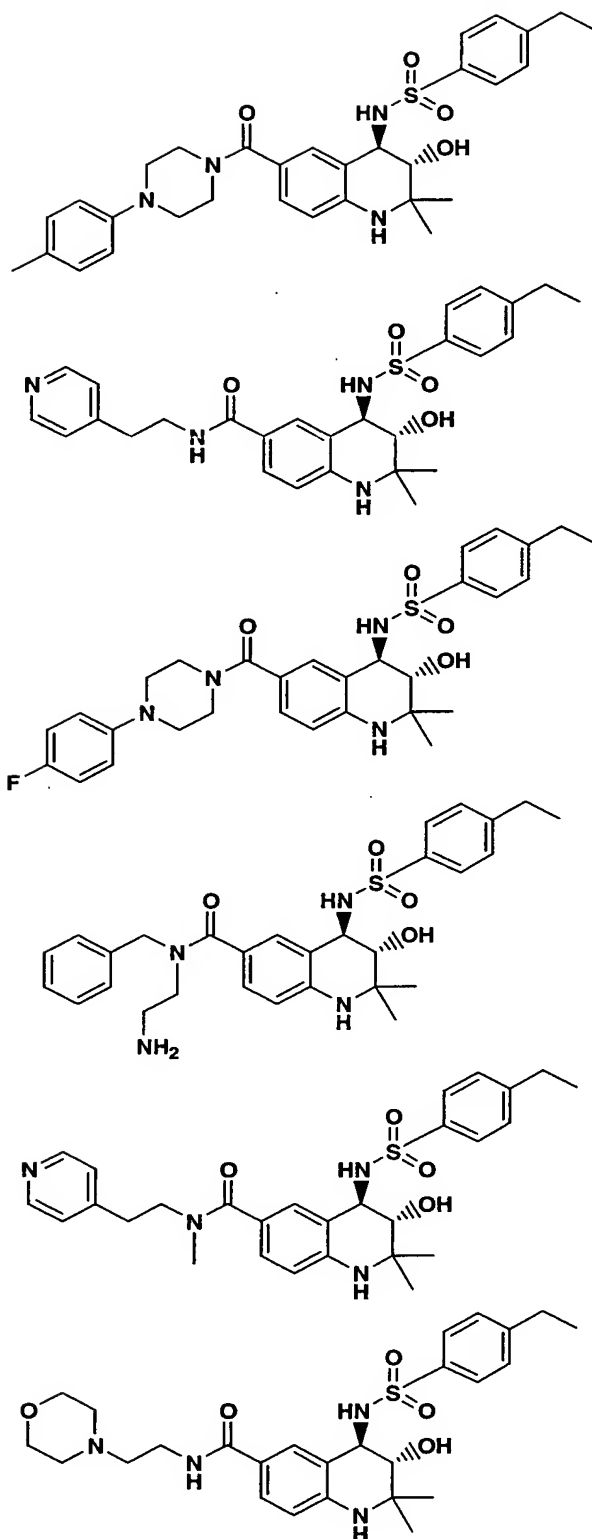


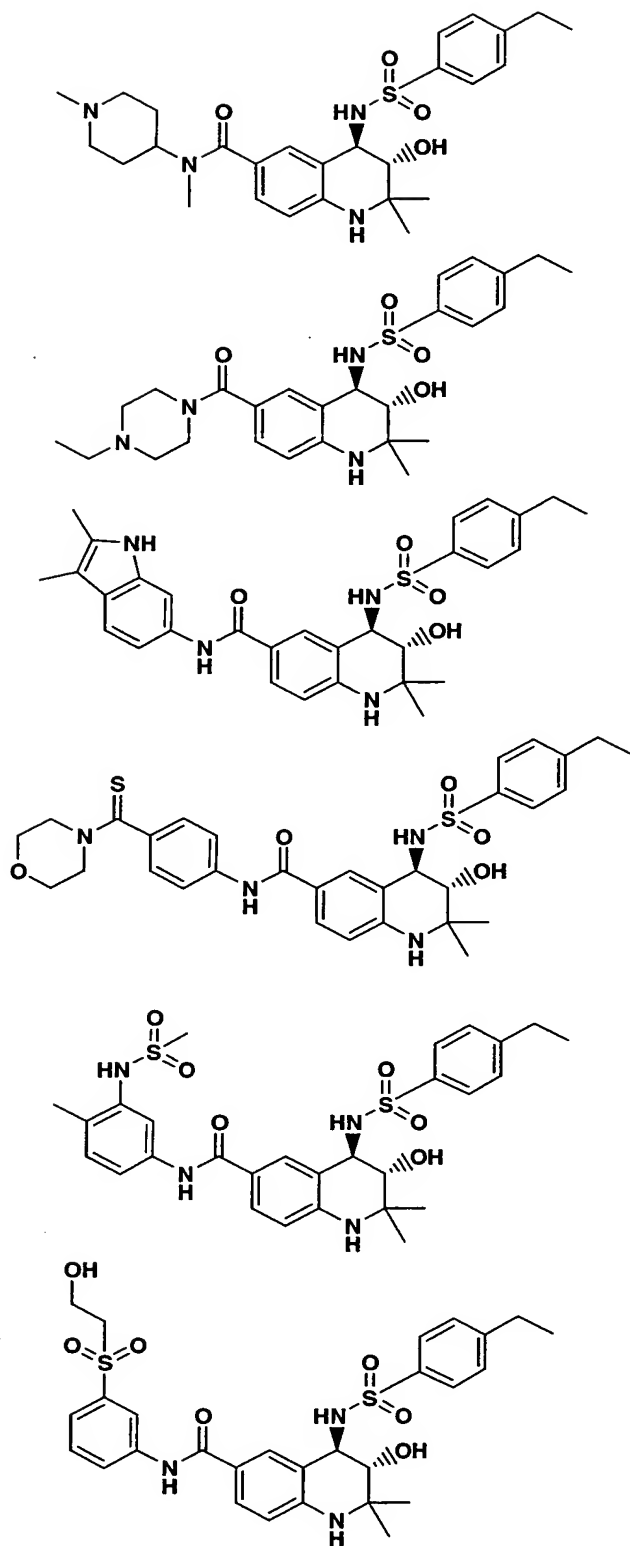


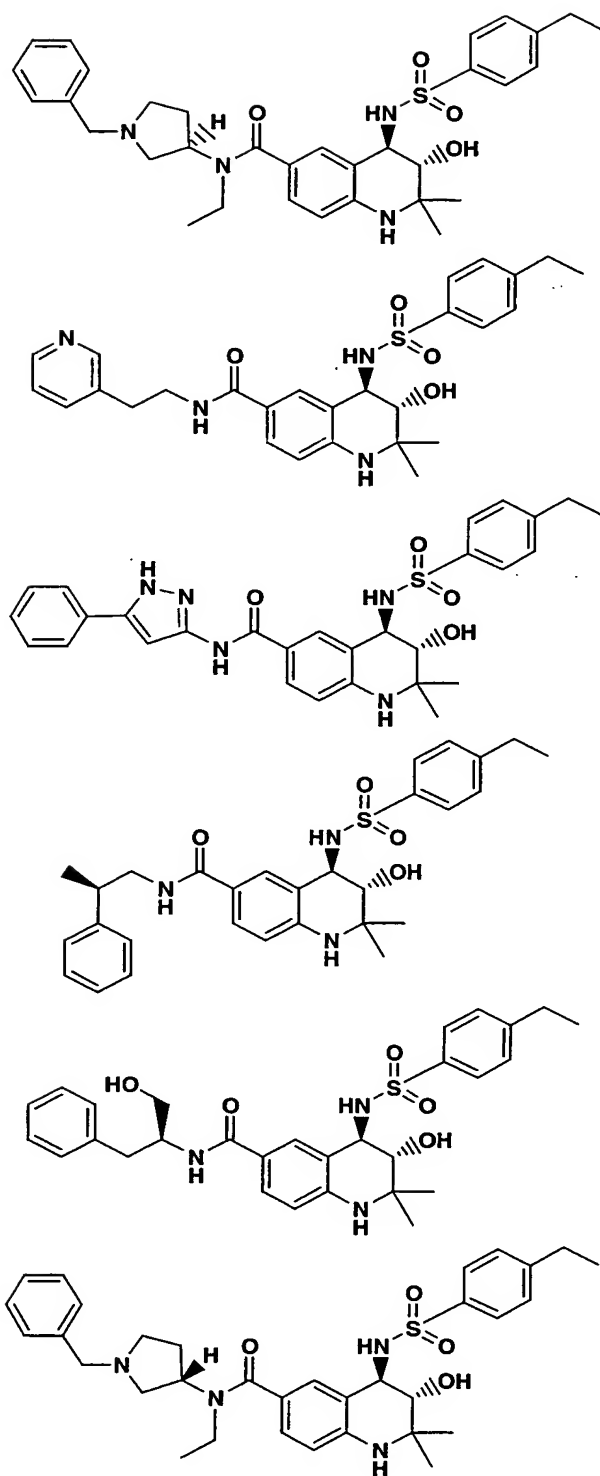




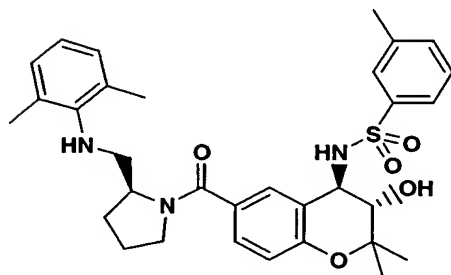
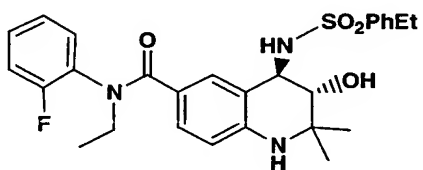
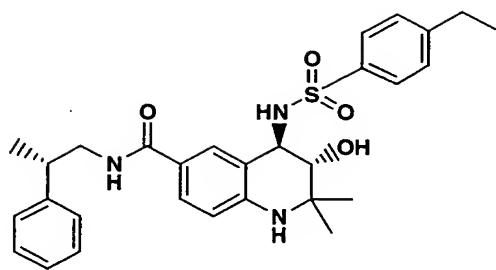




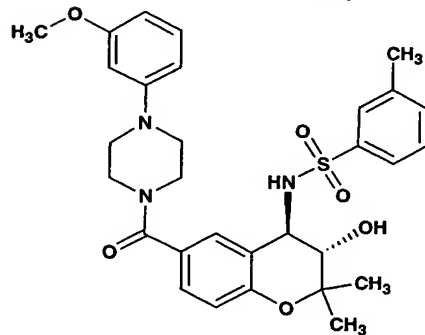
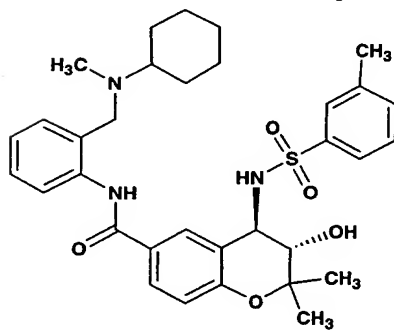
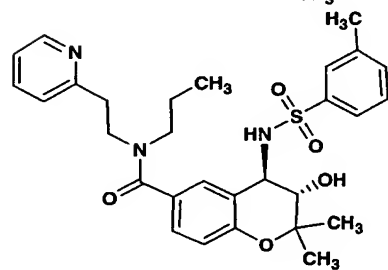
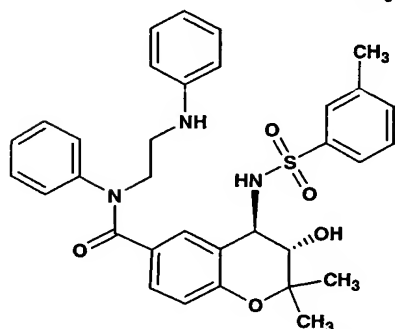
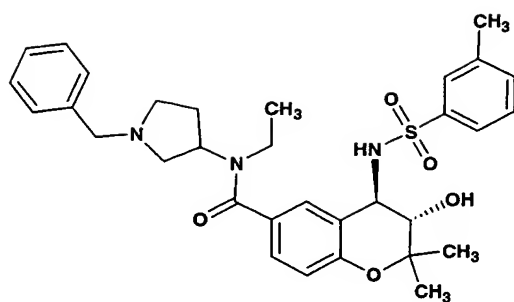


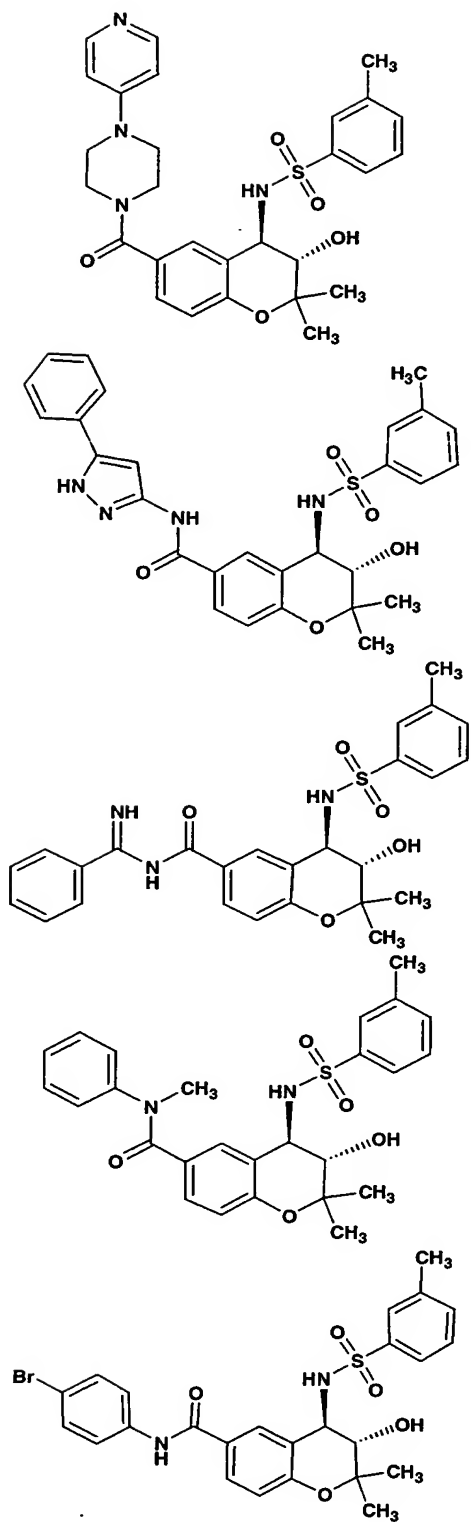


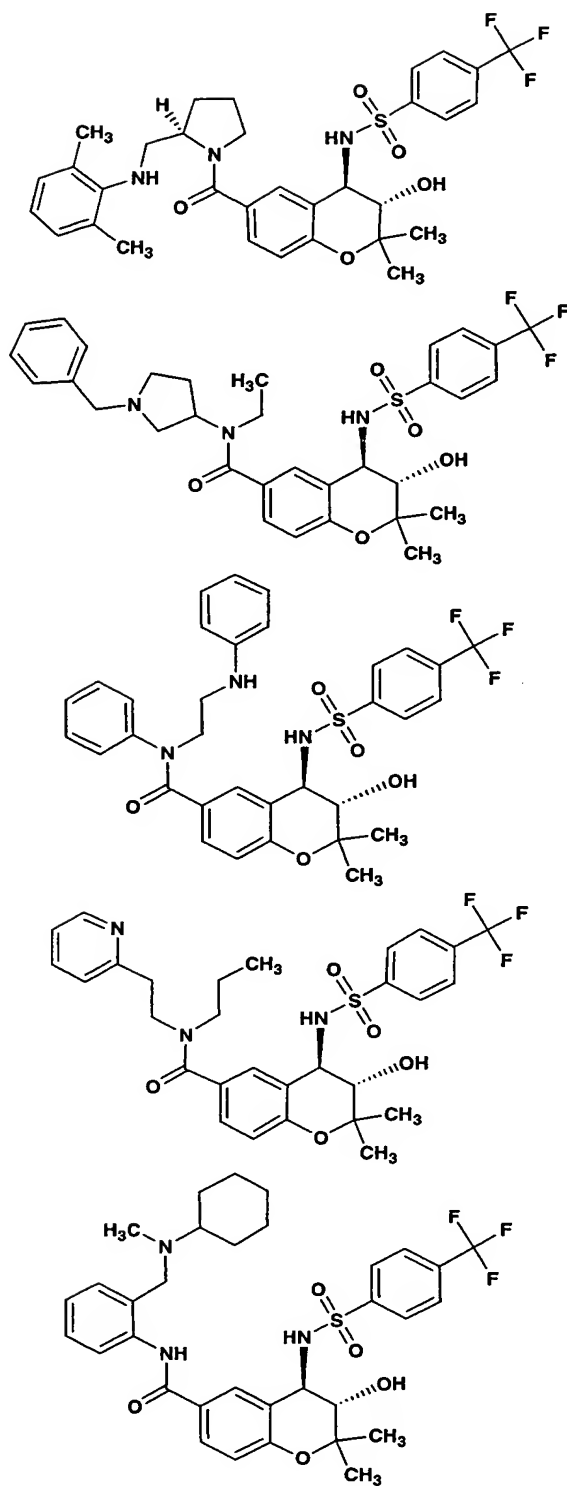
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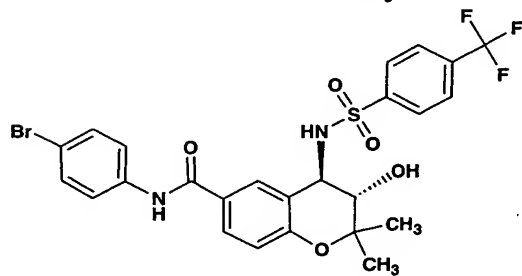
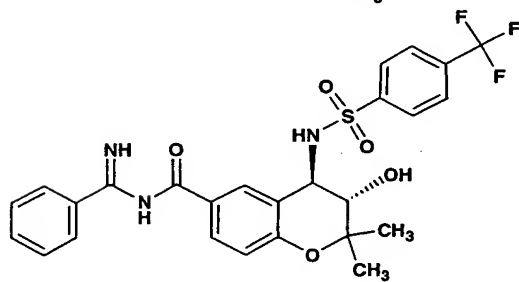
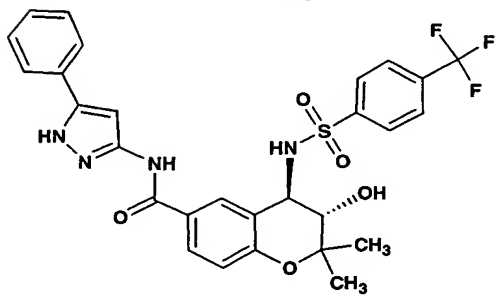
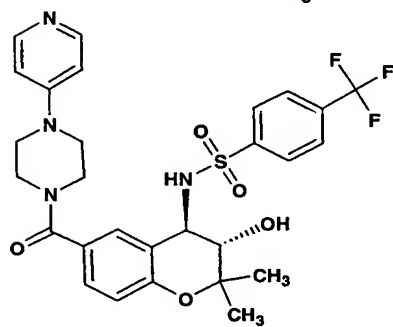
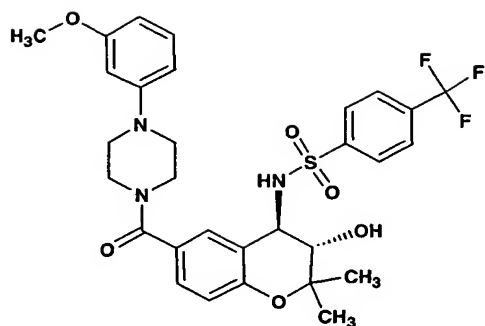


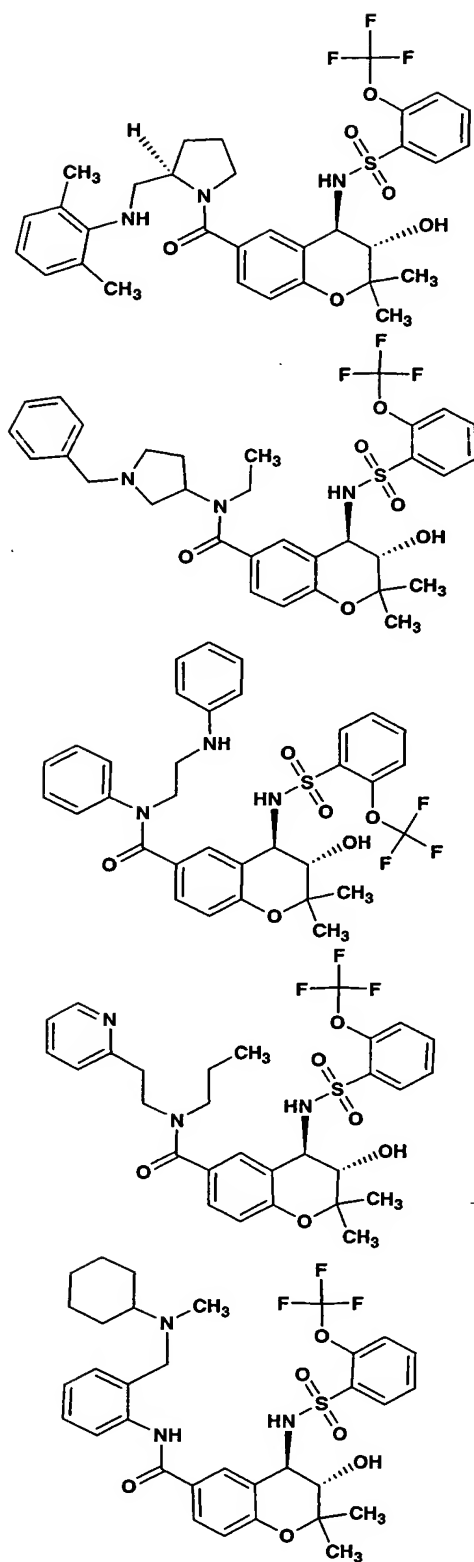
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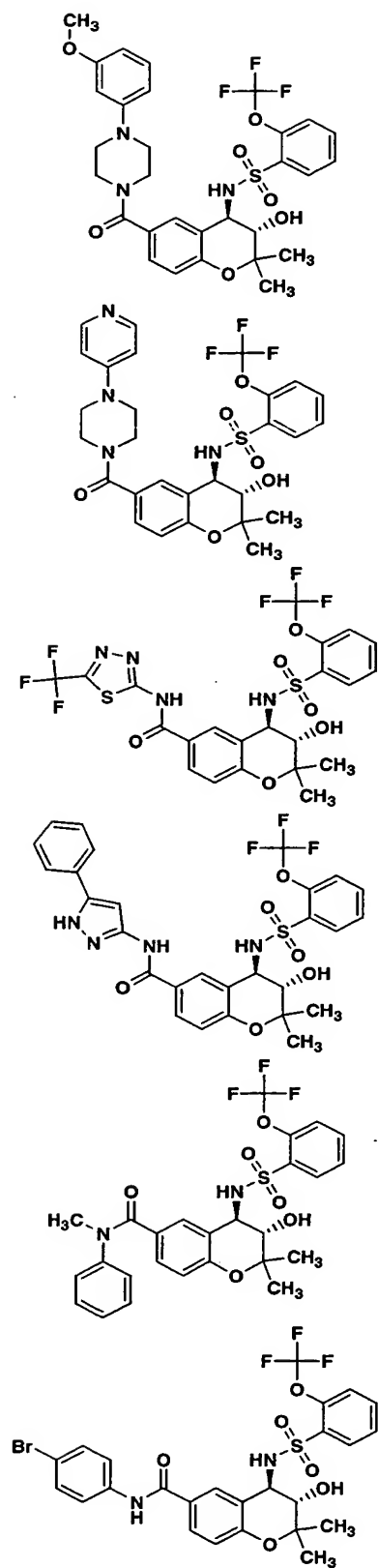


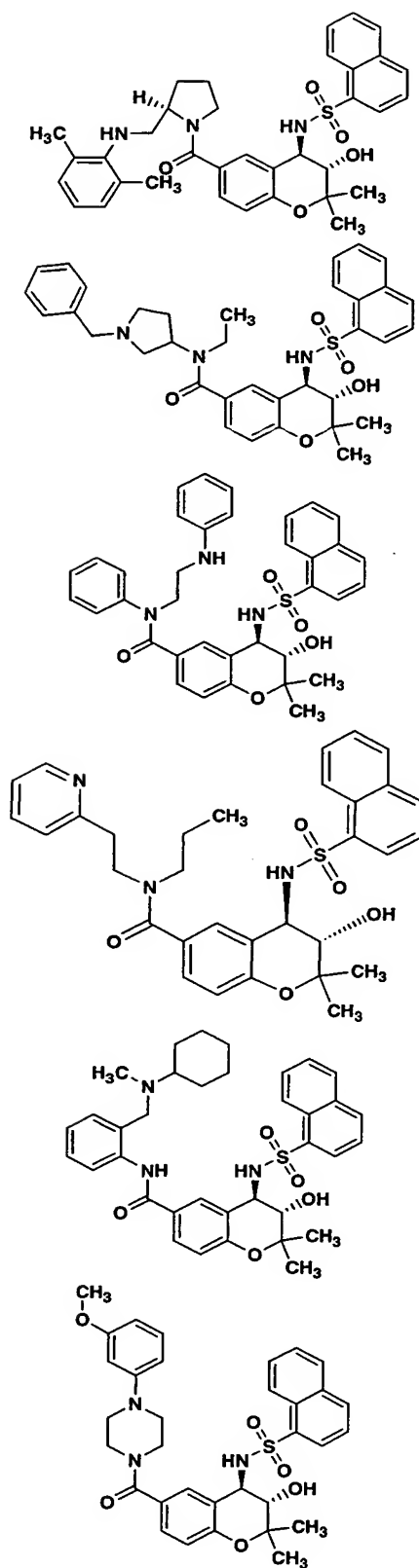


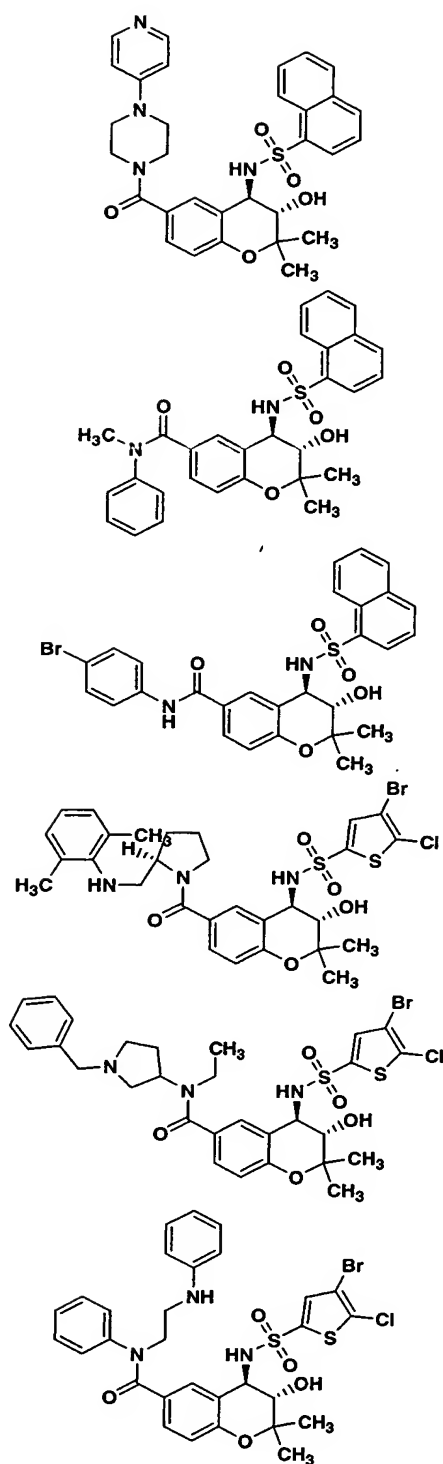


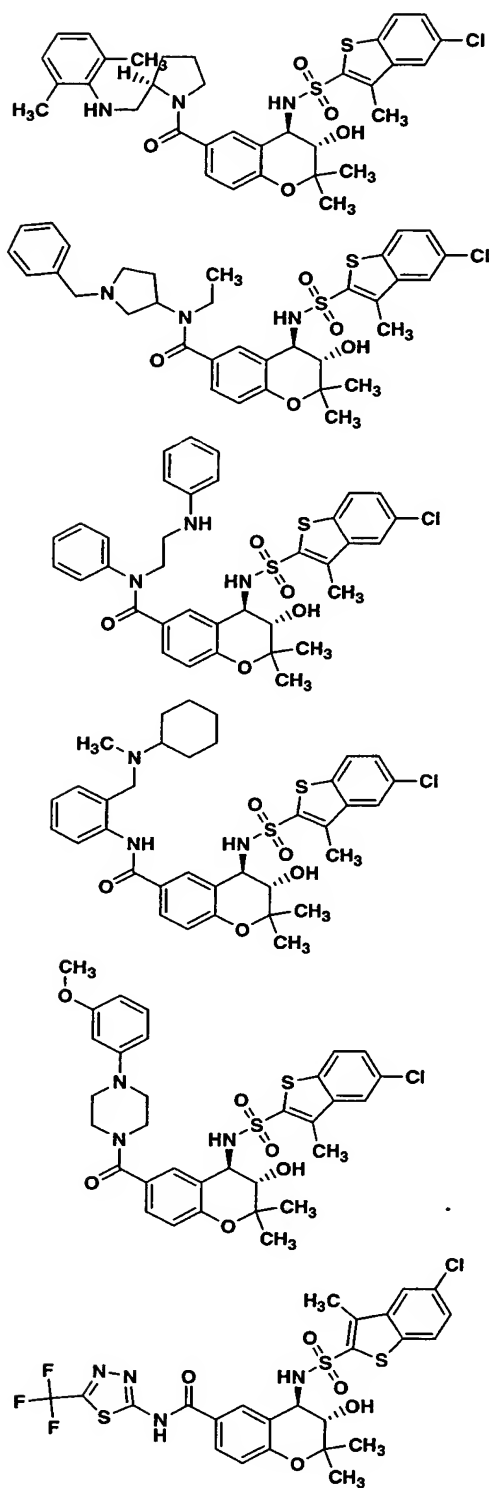


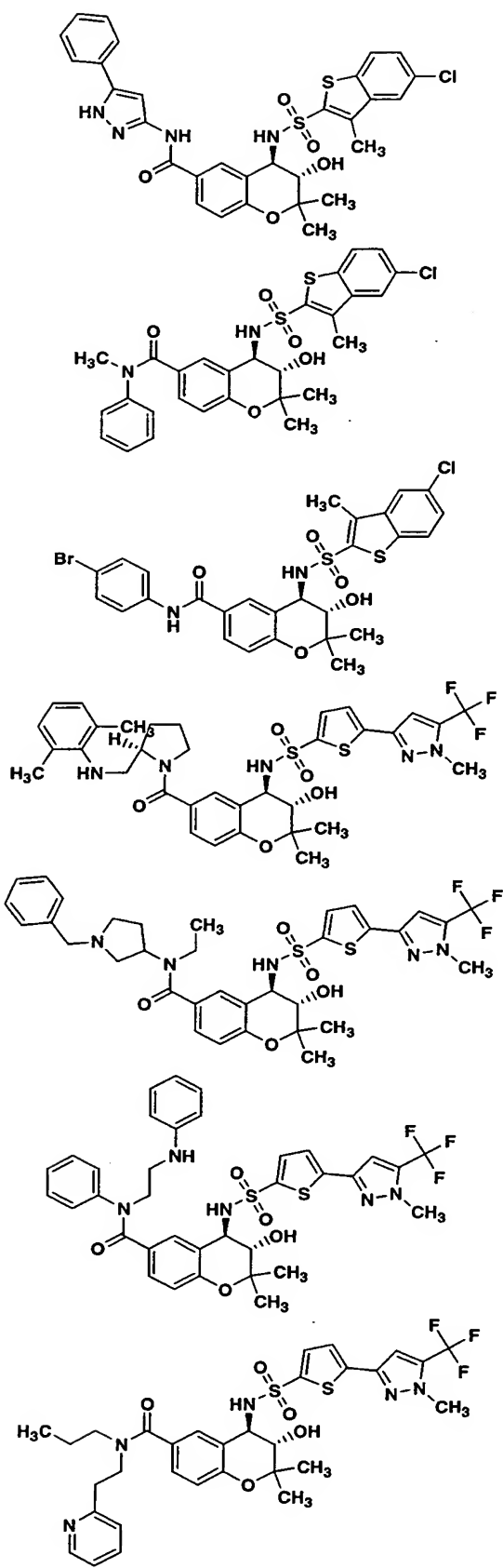


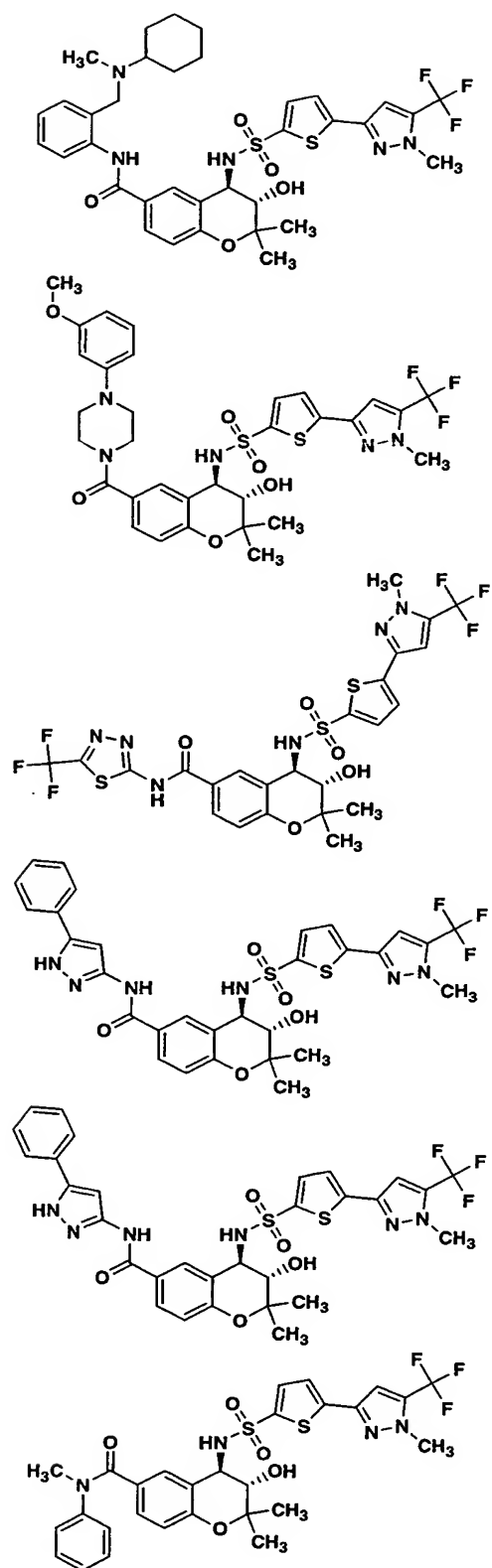


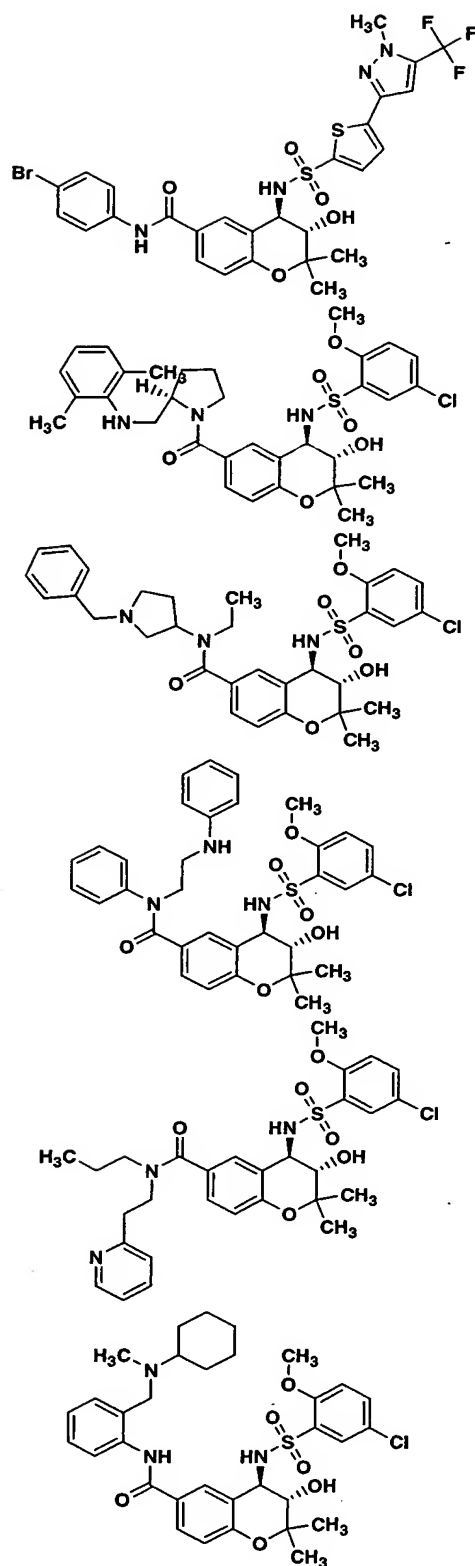


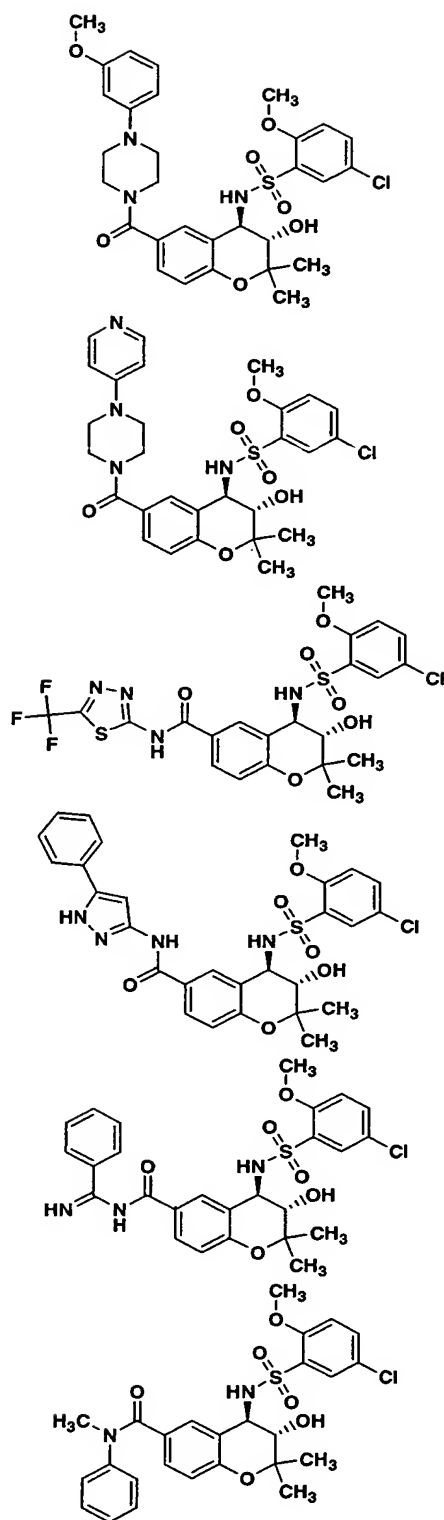












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